

82

A N

I N Q U I R Y

INTO THE NATURE AND CAUSE OF THAT

S W E L L I N G,

IN ONE OR BOTH OF THE

LOWER EXTREMITIES,

WHICH SOMETIMES HAPPENS TO

LYING-IN WOMEN.

—
PART II.



BY CHARLES WHITE, ESQ. F. R. S. 1728-1813

Member of the Royal College of Surgeons in London; Vice-President of the Literary and Philosophical Society, and Man-midwife Extraordinary to the Lying-in Hospital of Manchester, &c.

MANCHESTER :

PRINTED BY W. SHELMERDINE AND CO.

FOR J. MAWMAN,
Successor to C. Dilly in the Poultry, London.

1801.

TO

THOMAS PERCIVAL, M. D.

F. R. S. and A. S. London,

PRESIDENT OF THE LITERARY AND

PHILOSOPHICAL SOCIETY,

AND PHYSICIAN EXTRAORDINARY

TO THE INFIRMARY IN MANCHESTER,
&c.

These Sheets are inscribed

BY

his sincere Friend,

and much obliged

humble Servant,

THE AUTHOR.

Digitized by the Internet Archive
in 2015

<https://archive.org/details/b21522601>

P R E F A C E.

Had it not been for the following reasons, the author would not again have addressed the public, upon the subject of *Depot laiteux a la cuisse*, as it is called by some, by others *Œdema lacteum*, or white leg, and which he will distinguish, by the appellation, of *Phlegmatia albæ dolens Puerperarum*.

1st. Because, the disorder has been confounded with others even by men of science.

2dly. New facts have occurred for the further elucidation of the subject, and

3dly. His description of the nature and cause of the disease has been controverted, and other theories advanced in its place.

His

His Inquiry was first published in 1784. Before that time, nothing had been professedly written on the subject, except by foreigners. The complaint had not indeed wholly escaped his countryman, Sydenham¹; for though he ranked it in a different class of diseases, viz. Hysterical, yet under that head, he has described it, with other diseases of child bed women.

In 1792 Mr. Trye published *An Essay on the swelling of the lower extremities*

¹ In quo genere is, qui Tibias distendit, Tumor præ reliquis conspicuus est. Cum enim in Hydropicorum tumoribus duo hæc semper observari possint, ut Tumor scil. sub vesperam se majorem exhibeat, tum etiam ut pastæ instar madentis vestigium digiti fortius impressi, formamque referat; jam in hoc altero, tumor matutino tempore protuberantior est, nec digito cedit prementis, aut vestigium ullum manet. Plerumque etiam tibiarum alterutram tantum inflat: de cætero sive magnitudinem species, sive etiam superficiem Hydropicorum tumores ita ad amussim æmulatur, ut ægre se haud facile ab ea, quæ insedit sententia dimoveri patientur.

tremities incident to Lying-in Women. He has differed from the Author in several points, but he has done it in so gentlemanlike a manner, as to merit the author's warmest acknowledgments, and if there be some points in which the author differs from him, no doubt he will forgive the liberty he takes in noticing them. Mr. Trye is a practical or working anatomist, having been the assistant of Mr. Sheldon, Professor of anatomy in the Royal Academy of Arts. He received the first rudiments of midwifery under Dr. Denman, and is now, and was at the time of writing that Essay, surgeon to the Gloucester Infirmary.

In 1798 Dr. Ferriar published his third volume of Medical Histories and Reflections, wherein is contained an article, entitled, "*An Affection of the lymphatic Vessels hitherto misunderstood.*" Though this Gentleman is no practitioner in midwifery, he has been Physician to the

Manchster Infirmary, Dispensary, Lunatic Hospital, and Asylum upwards of ten years. He is a man of polite literature, and of considerable experience in his profession.

In 1800 Dr. Hull published *An Essay on the Phlegmatia dolens*. The doctor has a considerable knowledge and extensive practice, in every branch of the healing art. And the works which have come from his pen, sufficiently testify his abilities.

These circumstances render it necessary that the author should state to the public, what he has to enable him to defend his own doctrines against combatants, possessed of such abilities and such advantages, who are certain to detect him, if he have not truth on his side.

Although it is an unpleasant thing for a man to speak of himself, it may be necessary

necessary to those of his readers, who live at a distance, to say that he is at this time and has been for more than half a century, in full practice in midwifery, among women of every rank or condition of life. He had in the early part of his practice, the care for many years, of all the parish poor in the populous town of Manchester, and in a very considerable circuit of its environs. This was at a time, when there were few men-midwives, scarcely one in fifty in proportion to the present number; that branch of the profession being then principally in the hands of women. The men were only called upon in cases of emergency. For the last ten years the author has been *Man-midwife extraordinary to the Manchester Lying-in Hospital and Charity for delivering poor married women at their own habitations*, during which time, there have been delivered under that institution 8000 women. Previous to that time, he was surgeon to the
Manchester

Manchester Infirmary 38 years. He thinks therefore he may safely say, though there may be many men who have attended more women in natural labours, yet there are none, now living, who have attended so many difficult cases of parturition, and of diseases in consequence of it.

The author is in possession of a museum, furnished with every useful preparation, both wet and dry, which are necessary for giving anatomical lectures; where public courses were delivered in 1787 and 1788, by his late son Dr. White, and they have been repeated these two last years, by his worthy and ingenious friend, Mr. Gibson. He has the satisfaction, and, he may say, the advantage of being upon the best terms, with most of the faculty in the town of Manchester, and its neighbourhood. The reader will therefore see that he has not been wanting in opportunities for observation.

Although

Although he had seen many other cases of *Phlegmatia alba dolens Puerarum*, those which he related in his former INQUIRY, were such only as occurred in the years 1781, 1782, and 1783, when he began to entertain thoughts of writing upon the subject.

This disorder perhaps occurs less frequently than has been generally imagined.

In the 71st vol. of the Philosophical Transactions, part 2d. art. 22. Dr. Bland says, “ Of 1897 women delivered at the “ Westminster General Dispensary, five “ had large and painful swellings of the “ legs and thighs, but recovered.” This is nearly one in 389, supposing him in all these instances to have referred to the disorder in question, but as this is all he says upon the subject, it is impossible to determine this point. From some facts
which

which the author will lay before the reader, and from his own observations, he is inclined to think it does not so frequently occur as one in 380. Out of 8000 women delivered at the Manchester Lying-in Hospital, and at their own habitations, only four had the *Phlegmatia alba dolens Puerperarum*, or only one in 2000. The author is acquainted with several men-midwives, who have been in long and extensive practice, and who have never seen the *Phlegmatia alba dolens Puerperarum*: and to this may be added, that few persons who do not practise midwifery, have an opportunity of seeing this disease at its commencement. Foreigners have generally attributed this complaint, as well as many others, in the pregnant and puerperal state, to a *depot de lait*, but this idea is now pretty well exploded in this island.

But Englishmen have fallen into other errors, and have confounded it with

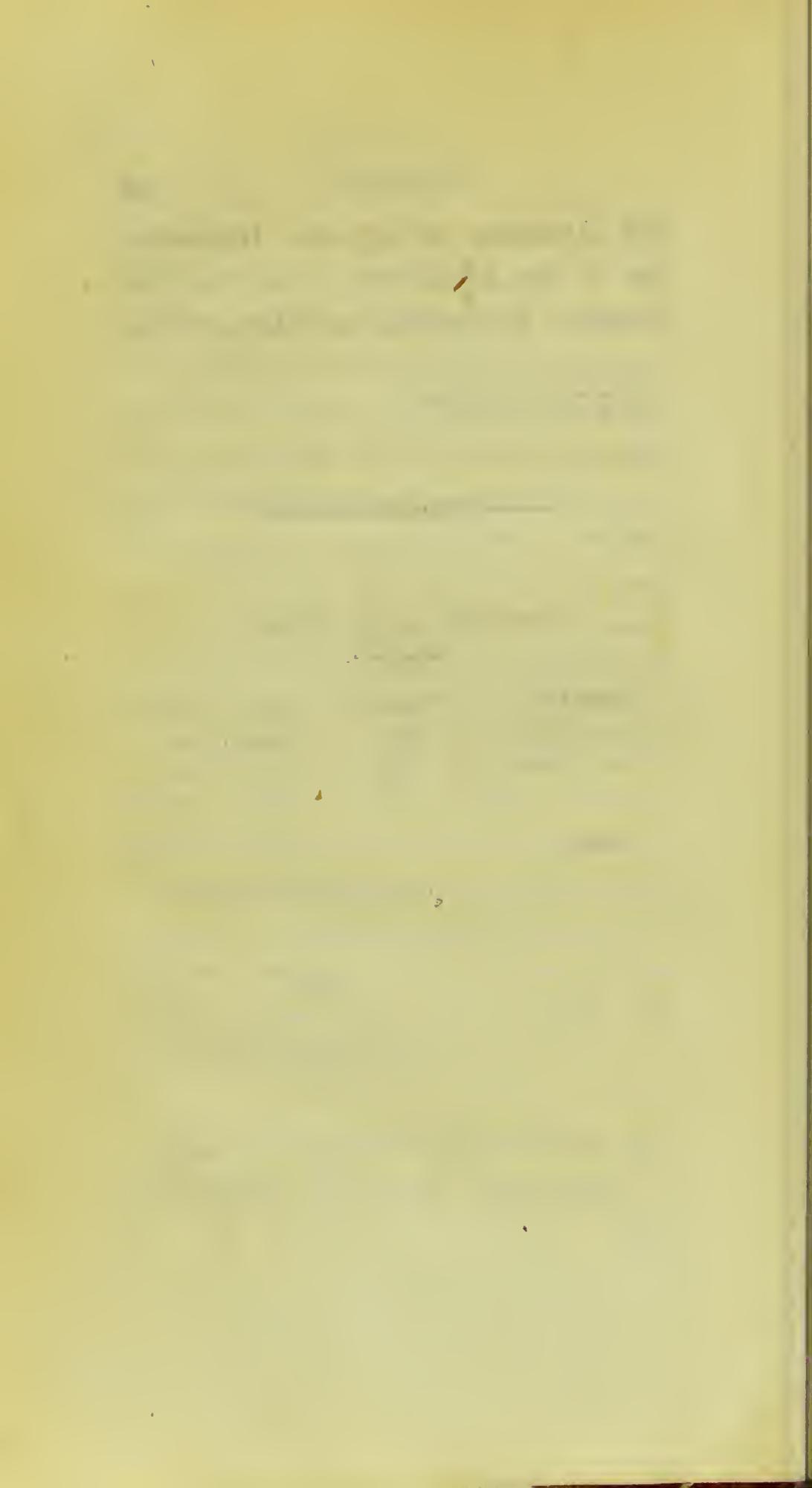
with Anasarca, Phlegmon, Inflammation of the Absorbents, Abscess, Mortification, Peritonitis, and Rheumatism.

Manchester, May 25th, 1801.

Directions to the Binder.



Plate First, after Page.....	100
— Second and Third, after Page...	102
— Fourth, after Page.....	104



AN

I N Q U I R Y, &c.

CHILD bearing Women are liable to many diseases, both in the pregnant and puerperal state, owing to the distention of the impregnated uterus, in the early months, and to its weight and size in the latter months, pressing against, and displacing many of the surrounding parts; to the violence of the labor pains; to the means made use of to assist delivery; to the absorption of putrid lochia; to the accession of milk in the breasts; and to the alteration the system undergoes, in both these states, bringing on diseases, which affect the arteries, veins,

B

nerves,

nerves, lymphatics, ligaments, cartilages, cellular membrane, muscles, tendons, urethra, bladder, rectum, and most of the viscera, occasioning sickness, vomiting, constipation, spasms, fever, floodings, varices, compression, and bursting of the vessels, prolapsus, inversion, and retroversion of the uterus, laeerations of the uterus, vagina, bladder, and perineum, suppressio and stilieidium urinæ, openings, betwixt the vagina and the bladder and betwixt the vagina and the urethra, herniæ, inflammation, abeess, metastasis or translation of matter, gangrene, separation of the bones, aseites and *anasarca gravidarum & puerperarum*, palsy, puerperal insanity, *peritonitis and phlegmatia alba dolens puerperarum*. We ought not however to confound these disorders, with each other, but keep them as distinct as possible. In order to acquire a perfect knowledge, and wholly to develope the nature, cause and seat of a disease, we should

should view it, when it is complete, in its simple uncomplicated state. It is no doubt useful to report complicated cases, but they are not calculated to teach us, the true character of a disease, which has not been perfectly understood, sufficiently ascertained, generally acknowledged, nor accurately described. To take the character of a disease, when complicated with others, would lead us into perpetual errors, as we should be constantly mistaking one disorder for another. We should likewise view it in every stage; in its rise, its progress, at its acmè, upon its decline, and its final termination; we should examine whether, and how often, it proves fatal, whether a perfect cure is ever, or always, obtained, and whether it happens at any certain period; whether there is ever any metastasis, and whether it ever changes its type, &c. We should not form our opinions, upon one or two cases, but we should view it in different constitutions,

constitutions, in different ages, in different seasons. We should view it in those who are in the highest health, before the commencement of the disorder in question, and in those who are debilitated, by other diseases, or by evacuations.

Since I wrote my former Inquiry, this disorder has been well described by a Foreigner. As I have not seen the original, I will take the liberty of transcribing the description of the disease from Dr. Hull's Essay on *Phlegmatia dolens*, p. 57 together with the Doctor's introduction to it.

“ In the celeb^r. Callisen's *principia systematis chirurgiae hodiernæ* published at Copenhagen in 1788—1790,
 “ this affection of the lower extremities
 “ is named *Oedema Puerarum*, and is
 “ so admirably, and at the same time so
 “ concisely treated of, that I with plea-
 “ surc

[5]

“ sure lay before the reader the whole
 “ of his account of it, as given in part
 “ second pages 18—20 § 34 30.

“ 34. *Oedema puerperarum*, aliis
 “ lacteum *est tumor elasticus, albescens,*
 “ *renitens, calidus, dolens, foveam im-*
 “ *pressi digiti haud retinens, puerperis*
 “ *haud infrequenter, gravidis rarissime*
 “ *infestus.*

“ 35 *Sedem huic oedemati præbent*
 “ *extremitates inferiores, una vel utra-*
 “ *que; dextram sinistra sæpius invadit*
 “ *morbus; rarissime extremitates supe-*
 “ *riores petit.*

“ 36. *Surgit plerumque duodecimo*
 “ *vel decimo quarto post partum dic*
 “ *tensio & dolor inguinis, sequitur tu-*
 “ *mor, qui sensim ad labia vulvæ &*
 “ *latus femoris internum, deinde per*
 “ *totum femur extenditur: secundo vel*
 “ *tertio die crus similia patitur; denique*
 “ *dolor,*

“ dolor, tensio ac sequens tumor in
 “ pedem transeunt, sub febri satis gravi.
 “ Eodem ordine morbus plerumque intra
 “ duas et octo hebdomades decrescere
 “ solet; interdum per longius tempus
 “ excurrit. Ab oedemate hydropico
 “ frigido facile distinguitur hic morbus
 “ eo, quod a partibus superioribus deor-
 “ sum perget, tumor caleat, doleat, nec
 “ foveam impressam retineat.

“ 37. Morbum inducentes *causæ*
 “ sœpe quidem esse videntur impedita a
 “ qualicumque causa lactis de sanguine
 “ secretio (I. 670), aut morbosa ejus re-
 “ sorptio (I. 674), seu lochiorum impe-
 “ ditus fluxus; haud raro tamen nec lac,
 “ nec lochia, nec indoles laborum partus
 “ in causa esse videntur, sed sola lymphæ
 “ haud attenuatae retentio ac resorptio im-
 “ pedita, a labe systematis resorbentis &
 “ glandularum lymphaticarum; quare
 “ per loca cutis scarificata nullum liqui-
 “ dum effluere solet.”.

The

The PATHOGNOMONIC SYMPTOM of this disease is a swelling of the whole *labium pudendi*, on the same side *only*, on which there is, a firm, glossy, warm, tense, elastic, painful, sudden swelling, of a pale white color, which attacks the hypogastric region, the loins, nates, groin, thigh, leg and foot of a lying-in woman ; and I must beg leave to impress this, upon my readers, that when one limb only is affected, the swelling is confined so exactly, to the *labium pudendi* of that side, that if a line were drawn from the navel to the *anus* it would be found never to go beyond that line, in the smallest degree ; and I must observe that this pathognomonic symptom of the swelling of the corresponding *labium pudendi* *only* is never wanting, in any case whatever. About nine times out of ten, it attacks one side only, and the limits are so exactly drawn that in no case whatsoever does the swelling rise higher than the loins and hypogastric,

tric region, nor spread wider than the spine and the linea alba. And this is so constantly and invariably the case, that it may confidently be said SO FAR SHALT THOU GO AND NO FARTHER.

After carefully reviewing the cases, which have fallen under my own inspection,—those of my friends and correspondents, and those upon record, I am well satisfied, that there is not one, of the genuine disease, in its simple uncomplicated state, sufficiently authenticated, that ever proved fatal—not one that was ever attended with any external inflammation, abscess, gangrene, or bursting of the skin, in the legs, or thighs, as in anasarca. That though the pain sometimes *begins* in the ham, or the calf of the leg, yet the swelling never *begins* so low. Mistakes have arisen on this head from the patient not thoroughly understanding the question, whether it was

the

the pain, or the swelling, which began there. Though it sometimes attacks women in both the lower extremities, in the same, or in different lyings-in, yet it never attacks the same side more than once, and it never attacks women after a miscarriage in the early months of pregnancy.¹ There are no red or purple streaks running up the limb, no inflammation on the skin, nor any visible inflammation whatever. The skin not only loses its natural colour, and puts on the appearance of a milky whiteness, but all the blue veins disappear, even the varicose ones if they had been such, before the disease began ; and there is less appearance of blood in the limb than in a natural state. There is no sensation of itching, nor throbbing in the part; the

c

pulse,

¹ Though I have received information of this disorder happening to the same limb, more than once, and to its happening after miscarriages in the early months of pregnancy, yet upon strict inquiry I never found it verified.

pulse, though frequent, is neither full, hard, nor strong; no absolute, nor relative plethora in the part, and frequently none in the system generally. The limb is not lessened by an horizontal position, the impression of the finger is not left upon it, nor does it issue any fluid, if punctured with a lancet, when the disorder is at its aemè, and seldom when it is upon the decline.

The great pain in the loins, and in the Hypogastric region, afterwards in the conglobate glands, in the groin, ham, and the middle of the leg, and lastly in the whole lower extremity, appear, to be solely in consequence of sudden distension. There can be no metastasis or translation of matter, from one limb to the other, for though I have never known the disorder commence *exactly at the same instant, in both the lower extremities,* I have known it complete in both at the same time.

I have

I have never known it change its type, to any other disorder, nor have I known, any other disorder terminate in this; but I do not mean to say, that other disorders may not precede, accompany or succeed it; for I am satisfied that it will not prevent any other disease.

I have carefully perused the cases published by Mr. Trye, Dr. Ferriar, and Dr. Hull. I have seen many similar to them all, and no doubt they convey much useful information, but many of them do not relate to the disease in question, they want many of the principal symptoms described by Pusos, Leveret, Callison, Hull, &c. as well as of those by myself; some of them have symptoms, which do not accompany the disorder, and there are others, so complicated with various complaints, that it is difficult to form an opinion of them.

Mr. Trye

Mr. Trye seems to be aware of this circumstance.²

Mr. Trye has related 15 cases, 11
of

² He says, "(1) the disease, of which he (Mr. White)
" has treated, is so far as I can judge, the same as that
" which I am about to consider : though on the one hand,
" I have not met with all the appearance which he de-
" scribes, and on the other, some on which he is silent,
" have fallen in my way."

" (2.) Mr. White's extensive practice has enabled
" him to form a general history of the complaint, and to
" that history I beg leave to refer my reader, because it
" is much more full than that which I can give from my
" own experience ; although as I have already mention-
" ed, I have observed some circumstances either not
" seen or not noticed by the very respectable author of
" the inquiry." Again he adds, " + Upon re-perusing
" Mr. White, I observe, he says, that suppuration ne-
" ver happens. His authority creates a doubt in my
" mind, whether or not I am mistaken in considering a
" glandular suppuration coming on after delivery as a
" part of, or connected with the disease in question.
" But I have neglected to observe whether or not it
" commonly affects the *labium pudendi*. ‡

* Essay on the swelling of the lower extremities, page 2.

† Page 75.

‡ Page 9, here he has neglected to observe the principal pathognomonic symptom.

of which have fallen under his own care, and four under the care of Mr. Taylor of Uooten-Underedge, but it does not appear to me clear that any of them are *phlegmatia alba dolens puerperarum* except the fifteenth, or last given by Mr. Taylor.

The 12th case given by the same gentleman, being very short, I will take the liberty of copying it, as it has been quoted, to shew that suppuration sometimes takes place in the limb in this disorder.

“ In the Summer of the year 1784,
 “ I attended a middle aged woman,
 “ who had a very extensive suppuration
 “ of the leg, from the ham to the heel,
 “ subsequent to, and in consequence of
 “ an œdematous swelling of the extre-
 “ mity after lying-in.” This case car-
 ries so little the marks of the disorder in
 question, that it requires no comment.

The

The 13th is the case of Mrs. R. who it is said, had the disorder twice in the same limb, at different lyings-in. The first time she is said to have had it, 1787, it was so trifling, and wants so much the characteristic symptoms of this disease, that I apprehend no body will venture to say it was the disorder in question. The second time she is said to have had the disorder, was 1791; but here likewise many of the characteristic symptoms are wanting. I shall only observe upon these two cases, that if either of them were the *phlegmatia alba dolens puerarum*, they were cured in a very short time, without either bleeding or blistering. Many other of Mr. Trye's cases were those of inflammations and abcesses.

Mr. T. in his appendix, page 70 says
“ I have considered the proximate cause
“ of the swelling to be seated in the lym-
“ phatic glands. I will not contend that
“ it must be so universally; because there
is

“ is a probability that the original seat of
“ obstruction and inflammation may in
“ some instances be in the principal
“ trunks of the absorbents within the pel-
“ vis, independant of, and abstracted
“ from the iliac glands, in which case
“ the inflammation may be continued
“ along the absorbent vessels downwards,
“ that is towards the labium pudendi,
“ leg, &c. as well as upwards towards
“ the thoracic duct.”

In his preface he says, “ I can easily
“ conceive, as I have mentioned in the
“ appendix, that the obstruction to the
“ return of the lymph, may commence
“ in the primary inflammation of a trunk
“ or trunks, and probably this may be
“ the case more frequently than I have
“ hitherto discovered or suspected it to
“ be.”

So that Mr. Trye does not seem to
have formed a definite opinion, whe-
ther

ther the proximate cause of the swelling be seated in the lymphatic glands, or in the trunks of the absorbents, or at least where it commences.

Mr. Trye allows that this disease is in consequence of parturition, by which an inflammation of a lymphatic gland may be brought on by three accidents; namely, pressure; the application of acrid matter; or by inflammation continued from an absorbent. The objection to the theory of inflammation being brought on by pressure, as I have observed in page 4 of my former Inquiry, is, that the disorder, most³ frequently does not appear till several weeks after delivery, whereas one would have expected it always to have appeared in a few

³ I have in that Inquiry inadvertently made use of the word *most* instead of *very*.—If I had said *very frequently* I should have been perfectly correct. Dr. Ferriar in his animadversions on this passage says, “I ‘cannot avoid noticing that the possibility of account-

in a few days, which seldom happens.

DR. FERRIAR has given us several
D cases,

"counting for this disease, from inflammation of the absorbents, had occurred to Mr. White and he has rejected the supposition upon grounds inconsistent with his own statement of the symptoms." After taking a good deal of pains and bestowing above two pages upon it, he concludes by saying that "the assertion at p. 47, does not appear conformable to the facts, from which it must be supposed to have been deduced." He says, "that in 9 cases out of 14 which Mr. White has stated the latest period was 16 days." In this case it was totally immaterial whether there were 9 or 5 out of 14. I do not rest my argument upon the superior or inferior number of cases, which occur at a late period of delivery, but I maintain that women are sometimes attacked with it several weeks after, and one or two such cases will be perfectly sufficient to do away the theory of inflammation being brought on by pressure. In works of taste or fancy, or in controversies, when the author is writing chiefly for fame or amusement, these kind of criticisms, are very allowable, but in recording medical facts, they may lead to important errors. There was no danger to be apprehended from my expressions as the facts were fully stated, in the cases which I had related, and to which I must refer my reader. Though I am decidedly of opinion, that the *phlegmatia alba*

cases, but they are none of them cases of the *phlegmatia alba dolens puerparum*, except

dolens puerparum, can never be occasioned by pressure, yet I can easily conceive, that a temporary complaint, similar to it, may be brought on, in the early months of pregnancy (viz. about the third or fourth) by the im-pregnated uterus, pressing the lymphatics, against one side of the pelvis, before the uterus has risen above the projection of the sacrum, and may cause a total, or partial, stoppage of the lymph, from the lower extre-mity but when the uterus rises high enough, to be supported by the spine, or a miscarriage happens, then the swelling will subside, and if from the latter cause, it will subside suddenly. I apprehend that cases of this sort, do not happen very frequently, as I have met with only one, which is inserted in the 10th vol. of the Medical Commentaries, page 302, which I will take the liberty of copying.

“ *The History of an uncommon Swelling of the lower Extremities in a pregnant Woman, terminating favourably immediately after an Abortion, By Dr. Evans, Physician at Liverpool.*

“ **A** Lady of a delicate constitution, being about three months advanced in her pregnancy, was (on the 19th of June, 1783) suddenly alarmed by an uterine hæmorrhage. The next day the discharge con-

except that of Jane Waters, whom the Doctor did not see, till her disorder had arrived at its acmè, and there is reason to conclude

" nued, in small quantity, attended with a slight pain
" in the loins. It was thought advisable she should let
" blood. Accordingly about ten ounces were taken
" from the arm. She also took a draught composed of
" the decoction of the red Peruvian bark, with vitriolic
" acid, every four hours: and, at bed time, an anodyne.
" This mode of treatment, was pursued for ten days
" without alteration, excepting the addition of a bolus
" of nitre and camphire to each draught.

" On the 30th she began to complain of her legs and
" feet being remarkably cold, and of a chilness over the
" whole body. The following morning, she had a pain
" in the left groin, a swelling of the labium pudendi of
" the same side, which extended around to the back,
" accompanied with a dysuria, a pain and swelling
" down the inside of the thigh, and the back part of
" the leg, with such a degree of stiffness as to pre-
" vent the extension of the limb, without great un-
" easiness. The leg was kept in the most favourable
" position for several days, and well rubbed with cam-
" phorated spirits.

" On the 19th of July, the swelling of the whole
" limb was increased, and had an œdematos appear-
" ance, but was harder to the touch than in a common
" anasarca. A blister was then applied to the upper
" and back part of the leg, which, in some degree, re-

conclude that he did not see her towards its termination, when an abscess formed, as

" moved the stiffness and pain. In this state every thing " remained for the space of a week, when sea-bathing " was tried, and continued for a fortnight. In three " days after the commencement of the bathing, a con- " siderable increase of the swelling of the whole limb " was observed, which came on every morning as soon " as the patient was out of bed, but it was attended " with less pain and hardness than before.

" On the 27, (in the afternoon), the swelling sud- " denly disappeared ; and the next morning severe " pains in the back and abdomen took place, with a " bearing down resembling labour. These complaints " continued for the space of two hours, at the end of " which period she was relieved by a large uterine " discharge, which, upon examination, proved to be a " miscarriage. Every symptom of disease now disap- " peared, and nothing remained but a small degree " of swelling towards night, which gradually dими- " nished as she gained strength."

There is another disorder which happens to women, in the early months of pregnancy, before the uterus rises above the projection of the sacrum, and goes away also, in the same manner, when the uterus rises high enough, to be supported by the spine, or as soon as a miscarriage happens. This disorder is that suppression of urine, which is occasioned by the uterus pressing a-

as he makes no mention of it. And one from Professor Zinn, transcribed from the medical Museum. Dr. Ferriar says, p. 115 “a case of this disease is related by Zinn, which deserves to be noticed, because it had a ‘fatal termination.’” Being possessed of the transactions of the Gottingen Society, where this case was originally inserted, I shall be able to shew that this is a mistake, owing to an omission in the translation. But I shall take further notice of these two cases in a future part of this work.

The first case which Dr. Ferriar has favoured

against the neck of the bladder, and in capacious pelvises, occasioning a retroversion of the uterus.

The case related by Dr. Evans is a complete refutation of the doctrine of inflammation of any kind being the cause of this complaint, as the lady was of a delicate constitution, and had not one inflammatory symptom, but had an uterine hæmorrhage, and had ten ounces of blood taken from her arm.

favoured us with, of a gentleman of an irritable habit, and upon which he has founded his theory, might be the disorder to which the Doctor gives the appellation of lymphatic rheumatism, but it bears no analogy to the disease in question. In page 95, Dr. Ferriar says,
“ But practitioners do not seem to be
“ aware, that all the lymphatics of a
“ large limb may take on a disposition
“ to inflammation, from internal causes.”
Why then is its situation in all cases so precisely limited? In page 98 the Doctor says, That there is a “ general
“ inflammatory state of the absorbents
“ of the limb,” Why then does it not visibly shew itself particularly before the commencement of the swelling? and in page 100 that “ the absorbents were
“ rendered incapable of performing their
“ functions, by the thickening of the
“ vessels, and the obstruction of the
“ glands; but the arteries being in a
“ sound state, the exhalents continued

“ to

" to pour out their fluid, which not being absorbed, must stagnate in the cellular membrane." Why then does not the limb pit when pressed, and subside, when in an horizontal position, at its commencement, rather than near to its termination? In page 103 he says, " I see no reason for supposing, that this affection is necessarily confined to the extremities, particularly in the lower limbs." If this disorder were a general inflammatory state of the absorbents of the limb and from an internal cause I should have agreed with the Doctor that there was no reason for supposing that this affection is necessarily confined to the extremities and particularly to the lower extremities, but since this is not the case, little will be required to prove the doctrine an erroneous one.

Whenever a conglobate gland of a limb is affected with inflammation to any degree, it always shews itself through the

the skin by the redness of the colour, and from whatever cause it proceeds, it frequently suppurates,⁴ either in the groin, the thigh, the ham, or the middle of the leg, whether it be from scrophula, syphilis, plague, &c. but in this disorder it never suppurates in those parts. An inflammation in the coats of the lymphatic vessels, either the cutaneous, or their superficial trunks always shews itself externally,⁵ by a red or purple streak running

⁴ The wound of an absorbent vessel in the finger or toe is sometimes succeeded by the suppuration of an absorbent gland in the groin or the axilla.

Pearson's Principles of Surgery, p. 43.

"⁵ Mr. Hunter saw a case in which the skin being pricked by a needle, which never had been used before, or touched any infectious or irritating substance occasioned the lymphatics of the arm to inflame, and shew themselves in the form of red lines, running towards the axilla. In consequence of this, some one of the glands were also inflamed and swelled; the patient had rigors and sickness; and all this in the space of a few minutes. I have also seen similar cases."

Cruikshank's Anatomy of the absorbing Vessels, p. 76.

running along their course, and this inflammation is communicated, for a small space, to the cellular membrane in which they are imbedded; whether it arises from poisons, caustic, or gangrene, external injury or any cause whatever, it is visible to the naked eye. I believe there is not a surgeon in any practice in the kingdom, who has not seen both lymphatic

E tic

Speaking of the glands of the ham, he says, " Dr. Hunter mentioned a case of a patient who was bit by a mad dog in the calf of the leg: the sore healed at first, but some weeks after broke out again: red lines were perceived running upwards from the sore, with the saphena minor, which dipt down in the ham and were lost. They were inflamed lymphatics going to their glands."

ibid p. 133.

Lymphatics inflame when they absorb poisons, such as the venereal virus, eaneerous matter, or the poison of a mad dog. Wounds received both by myself and others in dissecting dead bodies have given me many opportunities of seeing these vessels inflamed from an irritating matter they had absorbed from such a wound.

Cruikshanks' Anatomy of the absorbent vessels, p. 27.

tic glands and vessels inflamed, and yet I will venture to say that none of them ever saw the disorder in question, occasioned by, or even attended with, any such symptoms.

In September last, as I was inoculating a child for the cow pox, I punctured my left thumb with a lancet, armed with vaccine matter. It gave me the infection, which went through its regular stages. On the eighth day it began to inflame, and increased for several days; and on the 12th purple streaks appeared, running up from the thumb to the axilla, depicting the inflamed lymphatics, in the most accurate manner, and in very strong lines, which is accounted for, by Mr. Abernethy.⁶ I now lament very much

⁶ "There is another circumstance, which deserves attention; when the absorbents become inflamed they quickly communicate this disease to the cellular sub-

much, that I had not a drawing made from them, as it would have been a very perfect one of those vessels. When I was in this situation, I was called to visit a patient in Rutlandshire, and though I travelled post 120 miles, the pain or uneasiness was so very trifling, that I suffered no inconvenience from it, nor did it produce the least œdema.

The absorbents are more numerous than any other series of vessels, and they have more valves than either the arteries, or veins. They are not only liable to accidents, but to as many different disorders, as any other vessels, or organized parts,

"stance by which they are surrounded. Most surgeons have remarked, these vessels, when indurated, "to appear like small chords, perhaps of an eighth of an "inch in diameter: this substance is surely not the "slender sides of the vessel, thus suddenly augmented "in bulk but an induration of the surrounding cellular "substance to which the irritated vessels have commun- "nicated inflammation, page 179."

Surgical and Philosophical Essays, Part 2d.

parts. The coats of the lymphatic vessels, may be too thick, or too thin; either generally, or partially. They may be of too tense, or too lax a fibre; they may be compressed, they may be cut or lacerated, or they may burst by their contractile power. They are liable to spasm, pain, inflammation, slough, and gangrene. Acrid matter may generate in, or fix itself upon, the glands; or it may be absorbed by the lymphatic vessels, and by that means conveyed to the glands; but the disease in question cannot be owing to any degree of acrimony, as it happens to those who have never shewn any signs of it. The lymphatic glands are subject to syphilis, scrophula, schirrus, and cancer, and to be affected by different kinds of poison. The lymph which circulates through them may be too thick or too thin, and may coagulate, if at rest; it may offend in quantity, or in quality, or it may be totally

tally or partially obstructed, by a disease in the lymphatic system, or by accidents.

Mr. Astley Cooper has found the thoracic duct stopped by small funguses, which had rendered the tube impervious; and the valves at their terminations were thickened and opake.

Dr. Wrisberg in his obs. anatomico medicæ de syst. vas. absorp. &c. in com. soc. reg. Got. *see medical commentaries*, Vol. 14.—says, both with respect to pathology and practice, one fourth of the diseases to which the human body is subjected, depend either in a direct or indirect manner, on the system of absorbent vessels. There are, “Dr. Wrisberg observes, “three kinds of affections which chiefly arise from the want of a due operation of the lymphatics, 1st. Those depending on obstruction to the course of absorbed fluids. 2dly. Those depending on too great a secretion of the finer fluids

fluids from the common mass, and 3dly, Those depending on the function of absorption, being either stopped or diminished."

We must not therefore attribute every disorder in the absorbents to inflammation,

Whoever wishes for further proofs that the disease in question is not occasioned by inflammation of the absorbents, I must refer to Dr. Hull's Essay on the *Phlegmatia dolens*.

I am now to consider the doctrines of a gentleman who appears to have read every thing, which has been written on the subject, and has practised midwifery twenty years.

Dr. Hull in his essay on plegmatia dolens, p. 204. says, "no doubt re-
“ mains

“ mains in my mind that the PROXIMATE CAUSE consists in an inflammatory affection, producing suddenly a considerable effusion of serum and coagulating lymph from the exhalants, into the cellular membrane of the limb.”

“ Whilst the pyrexia which precedes or accompanies the complaint, proves beyond all doubt, the existence of general inflammatory action or diathesis; the excruciating pain, stiffness, tenderness, increased heat, and swelling of the parts, more particularly affected, equally evince the presence of topical inflammation.

“ The seat of the inflammation I believe to be in the muscles, cellular membrane, and inferior surface of the *cutis*, “ In some cases, perhaps, the inflammation may be communicated from these parts to the large blood vessels, nerves, “ and

“ and the lymphatic vessels, and glands
“ imbedded in them.”

There can be no inflammation, in any part of a human or animal body, wherein red blood is usually circulated, but it will shew itself, by an increased colour of the part, either of a red, purple, or bluish tint. Red blood is not usually circulated in the cornea, the pleura, nor the peritonæum, but when these parts are inflamed, a redness frequently takes place, in consequence of some red blood in them. There can be no inflammation in the external parts of muscles, cellular membrane, or any part of the skin, in the superficial blood vessels, cutaneous lymphatics, in their superficial trunks or in the glands, of the leg and thigh, but it may, in every instance where it occurs, be seen, in every living human subject. Pyrexia preceding, or accompanying the complaint,
is

is not an unerring symptom of inflammation, either acute or chronic, by some called passive, especially, when there is no hard, strong, full pulse, no redness, itching, nor throbbing of the part, no plethorick state of the general system, nor any partial plethora, which are none of them common attendants upon this disease. The excruciating pains, stiffness, tenderness, increased heat, and swelling of the parts, may be accounted for upon other principles.

If the lymph coagulate in the cellular membrane, why does this happen in the beginning, rather than towards the termination of the disorder?

If the lymph is contained in the cells of the cellular membrane, if we obtain one drop by puncture, why is the quantity limited?

F

Why

Why is its absorption not promoted by the common means?

If the coagulating lymph be thrown out, in consequence of a greater determination of blood, why does it not take place more early?

Why does not the same occurrence sometimes take place, after tapping for the dropsy of the ovary, amputation, or the operation for the popliteal aneurism?

Why does it ever happen to women during pregnancy, when an opposite state must prevail?

Why does it generally only take place in one limb, or in the other when the first is recovering?

Why the lymphatics of one side only,

only, should be filled, is evident, but why the blood vessels of one side should have the inflammation confined to them, when the same causes have been applied to both, and they communicate with each other, is not so obvious ?

If it proceed from a general cause, why are its limits so certainly defined ?

Why does it attack the lumbar region where the determination of blood before delivery would be greater than after ?

Why does it commence at the upper part, rather than at all points nearly alike ?

If this disorder be occasioned by a general or local plethora, or there exists a general or local inflammation.— Why does it ever happen to tender delicate women, exhausted and debilitated by violent floodings and other evacuations ?

Dr.

Dr. Hull p. 118 says, " If an inflammation, or enlargement of the lymphatic system of the limb, be the cause of the swelling independantly of any diseased action of the exhalants, it should always precede the swelling, and should be very evident." The same arguments may be used against inflammations of the arteries or the exhalants.

The Doctor says p. 132, " that those whose limbs have been pained, or anasarcaous, during pregnancy, are more subject to it."

This is an observation, which has not, I believe, been made by any other person, and to which I cannot subscribe,

Since I wrote my inquiry in 1784, I have seen many women, both in the puerperal state, and after miscarriages, who have been supposed to have had the disorder in question, but when I came

came to inquire into the symptoms, I found they had many which did not belong to the disease, and others, which did belong to it, were wanting.

Those supposed cases which most frequently occurred, were in women who had the *anasarca gravidarum*. After delivery and a little confinement to their beds, this complaint abates, or totally disappears; yet when they get out of bed, and hang their legs down, even in an easy chair, though the cause may be in some measure removed, the effect does not cease, but one or both legs swell, and such other parts, as have not recovered their tone; and this is attended with pyrexia, pain, stiffness, &c. but the pathognomonic symptom of the disease in question is wanting; and therefore whenever I see a swelled leg come on after *anasarca gravidarum*, I always view it with a suspicious eye.

It

In page 133 the Doetor says "That
" it has in many instances attacked
" women who were recovering from
" puerperal fever, and in some cases
" has supervened to thoracic inflamma-
" tion."

That anasarca, puerperal fever, thoracic inflammation and *phlegmatia albæ dolens puerarum*, may succeed each other, or even exist together, I have no reason to doubt, as they are by no means incompatible ; but as I have never seen such occurrenees, I should therefore conclude, they are so rarely met with, as not to be sufficient, to build a theory upon.

The swelled legs, or thoracic inflammation succeeding puerperal fever, may have a different origin. In the appendix to my 2d, 3d, 4th, and 5th edition of my treatise on Pregnant and Lying-in Women, speaking of the absorption

sorption of matter, being the immediate cause of the puerperal fever, I have said,
 " This matter is either carried off by
 " some of the eumunctories, as by stool,
 " which is the most frequent, by a fresh
 " flow of the lochia, or by sweat; or
 " else is deposited upon some part
 " of the body. If in the cavity of the
 " abdomen, upon the lungs,⁷ the li-
 ver,

⁷ " It is almost needless to remark that this fever must, of course, be complicated with any disorder that the patient might happen to labour under at the time of child-birth. The chief that I have met with in this way of any consequence, hath been the *phthisis pulmonalis.*"

Hulme on Puerperal Fever page 15.

" Both lobes of the lungs were inflamed, and somewhat black, particularly in their most dependent part."

Ibid 41.

— " adhesions of the lungs to the pleura; a collection of putrid serum in the thorax, and matter under the sternum, as in the case of Harriet Trueman—on enquiry of the patient's friends, I could not find that she had ever been in the least subject to any complaint in the breast."

Leake on the Child-bed Fever p. 93.

“ ver,⁸ or upon any of the viscera it
 “ generally proves fatal; if upon the
 “ breasts, the *limbs*,⁹ or any of the
 “ external parts, the patient always
 “ recovers.”

“ In una, quantum comperi, jecur erat mollis,
 “ enormis, et postquam perscissum est, abscessum con-
 “ tinere repertum.”

*Diss. Med. Inaug. de Febre Puerp. Patr.
 Keary. Edin. 1774, p. 8.*

⁸ Dr. Hulme, p. 43, says, “ The liver was of an
 “ extraordinary magnitude; in the right lobe was found
 “ a very extensive abscess.”

⁹ Dr. Denman† says “ she also feels great pains in
 “ the back, hips and groins, and sometimes in one or
 “ both legs, which swell, appear inflamed, and are
 “ exquisitely painful.” A little farther he says, “ In
 “ some there will be *a translation of the disease to the*
 “ *extremities*, where the part affected will become in-
 “ flamed, and a large abscess be formed.” In another
 “ place he says, “ Should abscesses be formed in the
 “ breasts, they are always much lamented, but there
 “ is great reason to conclude, that they prevent more
 “ grievous and dangerous complaints.”

Dr. Leake says, † “ some of those who survived,
 “ recovered very slowly, and were affected with
 “ wandering pains, and a paralytic numbness of the

† *Essay on the Puerperal Fever*, second edit. p. 9.

† *Practical Observations on the Child-bed Fever*, second edit. p. 59.

Dr. Hull says p. 140, "Four cases
 " of phlegmatia dolens have occurred
 " to me since the middle of October
 " 1799, which I shall relate here, as
 " they are marked by some circumstan-
 " ces, that strongly elucidate the essence
 " of the disease, and place its analogy
 " and connexion, with puerperal fever
 " in a striking point of view."

" limbs, like that of the chronic rheumatism. Some
 " had critical abscesses in the muscular parts of the bo-
 " dy, which were a long time in coming to suppuration,
 " and, when broke, discharged a sanguous ichor."

- Again, "Those who were seized with this fever were
 " not subject to abscesses of the breasts; and of those
 " who happened to have such abscesses, I have never
 " known one die; neither are they subject to a
 " diarrhoea, or much symptomatic fever, although the
 " pain attending a suppuration of the breast is often
 " very acute."

" It is remarkable that not one instance has been ob-
 " served, of any woman, who had an abscess in the breast,
 " being attacked with this fever; nor of one who, in con-
 " sequence of her labour, had such an affection of the blad-
 " der as to occasion a suppression of urine."

Denman's Introduction to Midwifery, vol. 2d,
Edit. 2d. p. 494.

In case the 12th, that of Mrs. —— of Manchester, which is the first of the four here mentioned, the patient had, I must agree with the Doctor, both *anasarca gravidarum*, which was general all over her body, and peritonitis puerperalis, but I cannot allow that she had the *phlegmatia dolens*, for the following reasons. The skin of the limb, had not the milky whiteness, but was inflamed, nor was the swelling confined to the *labium pudendi* of that side which was affected, but extended to both *labia pudendi*. I will take the liberty of laying before my reader, Dr. Hull's own statement of this and some other cases.

“ June 21st, 1800, in the morning she was attacked with labour pains—the membranes burst, “ the os uteri dilated to about the size of a crown piece, and the *labia pudendi* were most enormously swelled.—She was delivered about noon.—July 6th, She was attacked with violent pain in “ the

“ the left leg,—a blush of small extent
“ on the fore part of the leg,—July
“ 7th both the *labia pudendi* were be-
“ come more *enlarged* more tense and
“ tender. July 8th a slight redness
“ upon the upper part of the thigh—
“ it was merely a blush, July 16th the
“ *labia pudendi* were still swelled—Ju-
“ ly 27th the swelling of the *labia pu-*
“ *dendi* was not entirely gone. The
“ left lower extremity was considerably
“ more swelled in an evening, than in
“ a morning. The *right leg* was also
“ swelled about the ankle, but the
“ swelling was much less firm, than that
“ of the other leg, and retained the
“ impression from the finger longer.
“ August 9th the thigh was of a darker
“ colour in many parts, owing to an
“ enlargement of the cutaneous veins,
“ and her knee was somewhat contract-
“ ed, so that she could not easily bring
“ her heel to the ground. Several red
“ spots appeared upon the leg. The
“ right

" right leg was œdematoſe nearly as
" high as the knee."

" August 19th...Nine A.M. She was
" not risen. Her limb felt more com-
" fortable, and was less stiff, since she
" used the hot bath. The thigh was
" swelled and *dark coloured* in some
" parts. Ten p. m. I saw her after she
" had been in the bath. The left limb
" was rather *more swelled than in the*
" morning; *the red spots which were*
" *about half an inch in diameter, con-*
" *tinued upon the leg, but were not*
" *painful or tender when touched.*"

" August 23d The œdematoſe swel-
" ling of the right leg was very much
" reduced by the purging. The *swel-*
" *ling and stiffness of the left lower limb*
" *were evidently improved and the red*
" *spots were less conspicuous, but the*
" *knee was still contracted, and obliged*
" *her to walk with the joint bent.*"

This

This complaint therefore, decidedly was not the *phlegmatia dolens*, but a return of the anasarca, which had preceded delivery, and I must confess I cannot see any analogy or connexion betwixt *phlegmatia dolens*, and puerperal fever.

Case 13th, being Dr. Hull's second. Mrs. Hulse of Henry-street, Manchester. There are some circumstances wanting in this case to enable me to decide positively, whether this was the *phlegmatia alba dolens*, such as the swelling of the corresponding *labium pudendi* and the white leg, but taking it for granted that it was, it does not go to prove, or disprove, any particular theory, except that the lymphatic glands or vessels never appeared to be sensibly inflamed or enlarged.

Case 14th, being Dr. Hull's third. Sarah Knight of Salford. "Her right " leg and thigh were swelled during her

“ her pregnancy, and the veins were
“ enlarged ; she was lame and suffered
“ so much pain in her hip, that she
“ could not lie on that side in bed.
“ She was delivered on Sunday the 1st
“ of July, 1798. The pain in the right
“ hip, and the swelling of her lower
“ extremity soon went off after her de-
“ livery.——On the Sunday follow-
“ ing, she dismissed her nurse, and un-
“ dertook the management of her
“ house. She remained very well till
“ Wednesday the 11th. On this morn-
“ ing about nine o'clock she was seized
“ with chillness and rigors, which were
“ succeeded by heat, head-ach, and other
“ febrile symptoms. About four o'clock
“ p. m. a violent pain seized her right
“ hip, which on the day following ex-
“ tended to her groin, thighs, leg, and
“ was afterwards succeeded by a tense
“ elastic, lucid, hot, tender, painful
“ swelling, of the whole limb.” Whatever
was this woman's disorder, it appears
to

to have been a return of the complaint, which she had been troubled with, previous to her delivery ; after which she got well, with the assistance of rest, and an horizontal position. When she began to exercise and take the management of her house, earlier than she ought to have done, before the parts had recovered their tone, the disorder returned. But it wanted two principal symptoms, the swelling of the labium pudendi, and the white leg.

The fourth and last case which Dr. Hull saw, was Ann Massey, " During the two last months of her pregnancy, her legs and feet became so much swelled, that she was obliged to have a larger pair of shoes made. She was delivered on the 26th of June, 1800. July the 1st, she experienced some coldness and shivering, and other febrile symptoms. July the 5th she was seized with pain in the lower part of the

“ the chest, on the left side; respiration
“ was difficult, her cough slight. The
“ symptoms of pyrexia were much in-
“ creased. July 22d, the pain in her side
“ went off and a pain suddenly invaded
“ the whole left lower extremity, which
“ was equal in every part. It did not be-
“ gin in one part, and spread over the limb.
“ The limb was rubbed, and soon after
“ began to swell, &c.—August the
“ 10th, the right limb was attacked in
“ the same manner.”

In this case there was certainly the *anasarca gravidarum*, and after delivery, there might be thoracic inflammation, but I think it not improbable that it might be *hydrothorax*. My reason for being of this opinion is, that she had *anasarca gravidarum*. She was delivered on the 26th of June, and on the 1st of July, symptoms of pyrexia appeared, and on the 5th, she was seized with pain in

in the lower part of the chest, attended with difficult respiration, and on the 22d the pain in the side went off, and a pain suddenly invaded the whole lower extremity, &c. August the 10th the right limb was attacked in the same manner. Does not this shew evidently that this was a continuation of one disorder, viz. dropsy? That it was not the *phlegmatia alba dolens*, I am perfectly satisfied. It not only wanted the pathognomonic symptom, the swelling of the corresponding *labium pudendi* and also the *tumor albescens*, but it had symptoms which are not compatible with this disorder, viz. p. 182, "the cutaneous veins about
 " the top of it, (the thigh) were much
 " enlarged and blue, imparting a dusky
 " colour to this part." P. 184 "The
 " cutaneous veins of the thigh were
 " much enlarged, and appeared very
 " numerous, so that the colour of the
 " thigh was much altered."

There

There is but one case more, in Dr. Hull's Essay, which I shall have occasion to notice, and this will be necessary, because it is the only one, besides Professor Zinn's, where the disease has been supposed to prove fatal. This case of Mrs. C——— of Manchester, was communicated to Dr. Hull by Mr. Tomlinson. See case 19th, page 191. " In the latter part of her pregnancy, her legs were œdematoſe and very much swelled as high as her knees. She was delivered on Wednesday morning the 18th of October, 1798. On Monday morning about 7 o'clock, I was called to her, and was very much shocked to see such an alteration in her countenance —— She was extremely debilitated, her features were excessively shrunk, her pulse was extremely small, and so quick as not to be numbered—— at ten o'clock in the evening, she

" complained

“ complained of violent pain in the calf
“ of her right leg——on Sunday morn-
“ ing at nine o'clock, her leg was now
“ much swelled; at six in the morning
“ the pain had extended to the thigh
“ —at eleven in the evening, the
“ depression of the strength, and other
“ unfavourable symptoms continued as
“ before. The whole limb on exami-
“ nation was tense, considerably swelled,
“ and very tender to the touch, but not
“ discoloured. There was no inflam-
“ mation or enlargement of the lym-
“ phatics in the leg or thigh. The
“ state of the inguinal glands was not
“ inquired into. She died about three
“ o'clock on Wednesday morning. Af-
“ ter her death the leg burst, and dis-
“ charged a liquid slightly tinged with
“ blood, but this was in small quantity
“ and did not reduce the swelling ma-
“ terially. Neither the abdominal ca-

" vity nor the limb were examined by
" dissection."

It does not appear that there was any swelling of the corresponding *labium pudendi*, the leg not white, not that milky whiteness, described by Levret, not the *tumor albescens* of Callisen. The swelling did not begin in the groin or thigh, as described by the best authors, but in the leg. I must therefore reject this case, as not being the *phlegmatia alba dolens puerpararum*, but must attribute her death to a return of the anasarca, which had preceded her delivery, especially, since after her death the leg burst, and discharged a liquid, slightly tinged with blood, this being a circumstance, which frequently happens in anasarca, but never in *phlegmatia alba dolens puerpararum*.

I think therefore, I have proved decidedly, that the disease in question,
cannot

cannot be owing to any inflammation in the absorbents, nor to any inflammatory affection, producing suddenly, a considerable effusion of serum or coagulating lymph, from the exhalants into the cellular membrane of the limb, nor to any general inflammatory action or diathesis, nor to any general cause whatever. And, that no connexion nor analogy subsists, betwixt phlegmatia alba dolens purperarum, anasarea, puerperal fever, or thoracic inflammation. And, that there are various swellings in the lower extremities, even in lying-in women, which are different diseases and do not derive their origins from the same causes.

I do not contend that swellings, both of the upper and lower extremities, in and out of the puerperal state, may not arise from the different causes assigned by the Gentlemen whom I have quoted; but I am well satisfied that many of the cases

cases which they have reported are not the *œdema puerperarum* of CALLISEN, nor *phlegmatia alba dolens puerperarum*, which I have described.

The following case is different from any of those related by the above named Gentlemen.

A. B. A strong healthful woman, had a very laborious parturition, and was delivered, with the assistance of the forceps, of her first child, which died in the birth. She afterwards complained of a slight numbness in her left leg and thigh, and the leg swelled in a trifling degree, but recovered of these complaints in a short time. Her second parturition, was equally laborious, when I was called into consultation. After waiting as long as was prudent, she was delivered again with the assistance of the forceps, by her accoucheur in ordinary, and the child likewise died in

in the birth. Whilst the forceps were using, she was seized with great numbness in the left lower extremity, which was the side on which she lay, the numbness continued many months after her delivery, accompanied with a total inability to move the limb, but without pain. In a few days after her delivery, the leg swelled to three times its natural size, had a great stiffness and was of a pale colour. The thigh was not much swelled, and the groin and *labium pudendi* were not in the least enlarged. Though it is now two years since her second delivery, her leg continues to swell very considerably, particularly in an evening, and notwithstanding she can walk about without any assistance, she complains of numbness and debility in the whole limb.

This case like many others, which have been described, is clearly not the *phlegmatia alba dolens puerarum*, as both the pathognomonic and many other symptoms

symptoms of that disease are wanting; is it not very probably owing, to an injury, some of those nerves, which form the sciatic nerve, received in the pelvis, from the force used in delivery?



ON THE
NATURE AND CAUSE
OF THE
Disorder.

→→•←←

HAVING, I think, proved, what is not the nature and cause, of this disorder, I ought now to prove what it is.

In my former INQUIRY, I offered my opinion of the REMOTE CAUSE of this disorder, with the greatest diffidence. But I can now speak with confidence. I have such a body of evidence to produce, such a successive train of circumstances, as will outweigh, any single

single case, or any single dissection, that can be brought in opposition to them.

When a healthful woman, who has not had the *anasarca gravidarum*, is seized with this disorder, in her lying-in, in its simple, perfect, but uncomplicated state, and it is confined to one side *only*, which happens about nine times out of ten, it is then allowed by all authors, who have written professedly on the subject, that the swelling is confined to the limb, nates, lumbar and hypogastric region, groin and labium pudendi of that side, and I must add, that it occupies all those parts, and never in the smallest degree, deviates from that line. I should be then glad to know, whether there are any series of vessels, or branches of vessels, or organized parts, in the whole human frame, which occupy that space, and that only, except the absorbents, which arise from those

those parts, and pass under Poupart's ligament?

In addition to what I have said in my former Inquiry, I will now endeavour, to describe the course of the absorbents, as far as is necessary, for my present purpose. The exhalant arteries having poured out their lymph, into the cellular membrane, upon the external surface of the body, and into the different cavities of the parts before mentioned, it is taken up by the tubes of the absorbents, and is conveyed by the lymphatic vessels, into the lymphatic glands, by the *vasa inferentia*, and is conveyed from those glands, into the lymphatic trunks, by the *vasa efferentia*. All the lymph from the parts, affected by this disorder, is brought by the absorbents, which pass under Poupart's ligament, and under the peritoneum, lying between it, and the body of the os pubis, where that bone forms a part of
the

the brim of the pelvis, on each side of the crest of the pubis. This part of the prominent line, which forms the brim of the pelvis, on each side of the crest of the pelvis, in some subjects is very obtuse, in others as sharp as an ivory paper folder, and in one at this time in my Museum, belonging to Mr. Gibson, it is as sharp as some table knives with the edge jagged like a saw, but in all other respects it is a well formed pelvis. A part of the absorbents, which go under Poupart's ligament, pass up along with the iliac artery, upon the brim of the pelvis, and another part dips down into the cavity of the pelvis, wrapping round the prominent line of the brim of the pelvis, formed by that part of the pubis which, in some subjects, is so extremely sharp, and forms an acute angle, along with that bone.

To this I must likewise add, that the deep seated lymphatics, of the lower extremities, are situated among the muscles; they accompany the *blood vessels* and

and are few in number, when compared with the subcutaneous set.

Dr. Ferriar has totally misrepresented my account of the remote cause of the swelling of one or both of the lower extremities in lying-in women, and has argued and asked questions agreeable to his own representation of my statement. He says¹⁰ " That the disease " may be produced without a rupture of " a lymphatic in the *groin* which " Mr. White imagines to be affected by " the pressure of the child's head, a- " gainst the brim of the pelvis, during " labour: a supposition very question- " able in itself, even if there were no " direct facts subversive of his opinion." Here he stops short, and leaves out the principal part of my theory,¹¹ viz. " When the orifice made in the lym- " phatic is healed, and the diameter of

¹⁰ Ibid p. 11.

¹¹ Inquiry p. 51.

“ of the tube is contracted, or per-
“ haps totally closed by the cicatrix,
“ the lymph is retained in the lympha-
“ tic vessels, and glands, of the limb,
“ and *labium pudendi*, and distends
“ them to such a degree, and so sud-
“ denly, as to occasion great pain and
“ swelling, which always begin in that
“ part, next to which the obstruction
“ is formed; and when the obstruction
“ is in part or wholly removed, or the
“ lymph has found a fresh passage, the
“ part next to it is consequently first
“ relieved.”

Mr. Trye says page 38 of his Essay,
“ Now in the first place, I believe no
“ experiment has shewn that the lym-
“ phatics are ruptured in the living
“ body by any other accidents, than
“ those which destroy and tear to
“ pieces the vessels in general of a given
“ part.” To this I answer, that some
experiments made by Mr. Astley Cooper,
do

do shew that the absorbents have been ruptured in the living body by their own contractile power.¹² And though they were

¹² Medical Records and Researches 1798, Art. vii. p. 86 "Three instances of obstruction of the thoracic duct, with some experiments, shewing the effects of tying that vessel, by Mr. Astley Cooper, Lecturer in surgery, and assistant Lecturer in Anatomy, of St. Thomas's Hospital."

EXPERIMENT I.

" The extremity of the thoracic duct of a living dog was tied. The dog died 48 hours after the duct had been tied.—On opening the abdomen many of the viscera were obscured by an effusion of chyle, &c.

" These appearances were owing to the *rupture* of the receptaculum chyli, which in the dog is very large.

Experiment 2d. " Tied the thoracic duct of a dog. He died on the 5th day. EXAMINATION—Chyle and lymph had been extravasated in so large a quantity, as to have entirely concealed the aorta and vena cava. The receptaculum chyli had *burst*, and it was from this part that the fluids had escaped. The thoracic duct was much distended with chyle, the valves having prevented its escape by regurgitation."

Mr. Cooper says " The contractile powers of the absorbents are proved by the experiments to be very strong, for it appears that their action is sufficient to

were made upon brutes, that can be no objection to Mr. Trye, because he says p. 45 " It must not be said that no con-

" occasion a rupture of their coats. It it true that the
 " receptaculum-chyli, which was the part *broken* is
 " thinner, and less capable of resistance than the tho-
 " racie duct, yet it is able to bear the pressure of a co-
 " lumn of quicksilver, more than two feet in height,
 " the force therefore exerted by the absorbents, must
 " be acknowledged greater than that of such a column
 " of mercury; more especially when it is remembered
 " that living parts will resist a force which will readily
 " tear them when dead."

" It is not necessary to tie the duct to produce this
 " effect, if an animal is fed with milk, and after an
 " hour the extremity of the duct is exposed, and com-
 " pressed only for a few minutes, upon subsequent ex-
 " amination the receptaculum will be found *ruptured.*"

Mr. Cooper gives you one instance, see p. 109, " When
 " the duct being tied as in the former experiments, al-
 " though the dog for several days appeared duller, and less
 " inclined to eat than before; yet he gradually recovered.
 " It was found upon inspection, that a vessel given off
 " from the thoracic duct, opposite to the division of the
 " trachia into the bronchiæ, had passed into the ab-
 " sorbent trunk placed on the right side of the neck."

“ clusion is to be drawn from an experiment on a brute ; for the same consequences, as to a subsequent change of structure, follow wounds in the vessels of quadrupeds and of man. “ If an artery be wounded, not divided in a brute, there will be a contraction, and even an obliteration of its cavity ; and the same change takes place, if the wound be inflicted on the artery of the human subject.”

Dr. Latham has seen a rupture of the lymphatics in the living human subject. His words are¹³, “ In some instances indeed, even *actual rupture* of a lymphatic, as I have occasionally seen in rheumatism, may be the consequence of distension.”

It was the opinion of Mr. Hewson so long since as the year 1774, that if a

K lymphatic

¹³ On Rheumatism and Gout, p. 14.

lymphatic vessel were tied, in a living dog, it would burst.

Dr. Baillie in his morbid anatomy, p. 107, says, "The thoracic duct has also been known to be ruptured; although this is exceedingly rare."

Mr. Trye says, p. 39 "Secondly, The head of a child in its descent can act upon the Iliac vessels at most, *but as the pad of a tournequet does upon those of the upper and lower extremity;*" and a little further he says, "yet a rupture of a lymphatic trunk has never been known, or even suspected to follow the application of a tournequet on the arm or thigh."

The use of the pad of a Tournequet, is to stop the circulation of the blood in the arteries of a limb; if you effect that purpose, you certainly prevent the exhalants from throwing out the lymph,
this

this being granted, the absorbents can never take up such a quantity of lymph, as to endanger the bursting of a lymphatic, or even to gorge it with lymph. This objection therefore, to my Theory, must fall to the ground.

He says, p. 40, "Thirdly, If I compress a lymphatic trunk, I readily force on its contents, if the remaining part of the road to the thoracic duct be obstructed, and then its sides will be squeezed together; and by reason of the thinness of its coats, it will in the compressed portion occupy the smallest share imaginable, so that it will hardly be ruptured in the place in which the pressure is made;" The answer to this is, that if the lymphatic trunk be compressed between two hard bodies, viz. the Gravid Uterus, and the brim of the pelvis on one side of the Os Pubis, when it forms a very obtuse angle, it may produce a slough, and in

time

time a separation of that slough ; but if the brim of the pelvis forms an acute angle in that part of the os pubis, so as to be as sharp as an ivory paper folder, or a knife, it may cut immediately through that lymphatic trunk. He goes on to say, “ and if from the distension of the vessel by the obstructed returning lymph the vessel must be ruptured below the pressure, no reason can be assigned why the breach should always be made in one precise spot of the inferior portion of the trunk, rather than in any other ; for example, why should it happen within Poupart’s Ligament rather than somewhere in the leg and thigh.” Besides the reasons I have already given, Mr. Cruikshank says, p. 71, “ The glands of the thigh or arm will sustain a large column of mercury ; whilst the glands on the mesentery, or *on the lumbar Vertebræ*, easily burst. In this respect, the last resemble the viscera of the abdomen and thorax

“ thorax, whose texture is much more delicate and tender, than those of the external muscles.” And Mr. Astley Cooper says, “ It is true that the receptaculum Chyli, which was the part broken, is thinner, and less capable of resistance than the thoracic duct.” It is therefore perfectly clear that all the different parts of the absorbents are not equally capable of making the same resistance.

Fourthly, Mr. Trye speaking of the lymph says, p. 41, “ when in circulation it is probably the thinnest of the known animal fluids.” Q. Is it thinner than the tears, the saliva, the urine, or water in the ventricles of the brain?

Mr. Hewson, in his Experimental Inquiries, part second, p. 102, speaking of the lymph, says, “ But notwithstanding the plausibility of all the arguments from which such conclusions

“ sions were made, with respect to these
“ fluids, it will appear in the sequel,
“ that although they be so transparent
“ in living animals, and so watery in
“ dropsies, yet in animals in health they
“ differ so much from water, that they
“ not only coagulate when exposed to
“ heat, but also when merely exposed
“ to the air; in which circumstance
“ they agree most with that part of the
“ blood called the coagulable lymph.”

Mr. Trye further says, p. 42 “ Now
“ were a rupture of an external Iliac
“ trunk to take place, either the lymph
“ must for a long time continue to flow
“ through the wound, or by a speedy
“ coagulation of what was first extra-
“ sated, the further escape of it must
“ be prevented. Admitting the first
“ proposition, the lymph would be dif-
“ fused through the cellular substance
“ of the abdomen, and produce an uni-
“ versal œdematose swelling of the pa-
“ rieties

" rietes, and in that case, the ill effects
" of pressure, would be perceived im-
" mediately after parturition : but if
" the latter proposition be true, then the
" lymph could not escape so as to make
" pressure on any particular viscus, as
" is supposed by Mr. White in his re-
" marks on Case V.—Vide Inquiry,
" p. 50."

The Iliac lymphatic trunk is situated behind or under the Peritoneum, and if it be ruptured, the lymph will be extravasated behind that membrane ; the quantity, and the time it takes in discharging, will vary in different subjects ; but so situated, and so circumstanced, it is not in the least probable that the lymph should be diffused through the cellular substance of the abdomen, and produce an universal œdematose swelling of the parietes ; but as both the bladder and the uterus as well as the ruptured lymphatic, lie behind the Peritoneum and

so very near together, I can easily conceive that the lymph may in some cases, be extravasated and accumulated in that part, in sufficient quantity to press upon those two organs, and the urethra.

He further adds, p. 42, "Fifthly I
" have a preparation of lymphatics
" which being compressed by a tumor
" could not transmit the lymph: the con-
" sequence was not that they burst, but
" that yielding to the impelled lymph,
" they became varicose and suffered
" their diameters to be enlarged to the
" size of a crow's quill, and as they
" grew larger, their coats seemed to be
" thickened." When a lymphatic is
obstructed by a tumor which has been
gradually enlarging, it is not probable
that it would burst, but would suffer
its diameter to be enlarged, and the
lymph would find itself a new route,
and if it did not, I should be glad to
know what would become of it?

" Sixthly,

" Sixthly, I have seen the swelling
 " of a leg and thigh entirely removed
 " in forty-eight hours." I must ac-
 knowledge I never saw or read a case of
 the genuine *Phlegmatia alba dolens Puer-*
pérarum getting well in so short a time ;
 and I am rather surprised to find a
 doubt expressed " with respect to the
 " lymphs finding a new route." After
 so many operations successfully perform-
 ed in this kingdom for the aneurism, sure-
 ly there can be no difficulties of this sort
 arise in the lymphatics, which are known
 to be more numerous, and to anastomose
 more frequently, than the arteries. And
 I am still more surprised when Mr. Trye
 asks the question, " or what is to dissolve
 " the lymph jellied in the vessels, and
 " fit it for quickly pervading some of the
 " narrowest canals in the body ?" There
 is hardly a part of the human body which
 may not be absorbed, but what will be
 most in point in this case¹⁴, is the large,

L

" firm,

¹⁴ Medical and Chirurgical Transactions, vol. I.
art. 9. p. 148.

"firm, and brawny" aneurismal tumors in the ham, which have been absorbed, after the Femoral artery has been tied¹⁵.

DR. FERRIAR says¹⁶, "Mr. White has laid particular weight on the commencement of the *swelling* at the groin, because he has made that fact the basis of his theory: and from his general accuracy I have no doubt such was the progress of the swelling in the cases which fell under his own observation. But it is not invariably the course of the disease."

I have never seen nor read a case, which was the genuine disease, that the *swelling* did not begin there.

The commencement of the *swelling* at the groin, was not first noticed by me, but

¹⁵ See Medical and Chirurgical Transactions, vol. 1. art. 9. p. 138.

¹⁶ Medical Histories, vol. 3. p. 110.

but by Puzos, Levret, Sagar, &c. who could not make that fact the basis of their theory, which was that of *une depot de lait*. This observation has since been confirmed by Callisen. These gentlemen could have no motives in this relation, but to be faithful recorders of the symptoms which they had observed.

Dr. Ferriar observes that, " In dislocations of the Humerus for example, where the capsular ligament is torn, and the head of the bone is forced under the axilla, it is very probable that some of the lymphatics may give way. Yet we are not acquainted with any instance in which the absorbent vessels, or conglobate glands have become enlarged and hardened, accompanied with this particular kind of effusion, though such dislocations have not been reduced for several months, and sometimes not at all. Rupture of the absorbents is certainly

“ a much more probable occurrence, in
 “ such circumstance than in the act of
 “ parturition.”

The reader will see by note¹⁷ that I
 had a long time ago paid great attention
 to the laceration of the capsular ligament
 by dislocation of the shoulder joint ;
 and

¹⁷ “ For example, I have for many years taught
 “ the following new doctrine about luxations, viz.
 “ That when a dislocation is produced by violence
 “ in an healthy state of the joint, the capsular liga-
 “ ment is lacerated, not simply stretched. I proved
 “ it to be highly probable from the anatomy of the
 “ joints, and from experiments made upon dead bo-
 “ dies; and shewed that the difficulty of reduction,
 “ in some cases, does not depend on the imaginary
 “ contraction of muscles, nor the impossibility in
 “ others, on the imaginary inspissation of the *synovia*;
 “ but that in a simple dislocation, the facility or dif-
 “ ficulty of reduction may probably arise from the
 “ nature of the laceration; and that the impossibility
 “ of reducing an old dislocation is owing to the union
 “ of all the lacerated with the neighbouring parts.
 “ In my lectures, I always signified a desire of see-
 “ ing such cases. Mr. Gataker was kind enough,
 “ some years ago, to gratify my curiosity upon one

and I may say, that I have had some experience in accidents of that kind ; that I have been possessed of every source of information ; and that I have employed it to an useful purpose ; viz. to the improvement of that branch of the profession ; but I am rather at a loss to know what the Doctor aims at. Does he think it possible that the bursting
of

" such occasion ; and Mr. Thomson lately did me
" that favour, in a case that proved, in a most sa-
" tisfactory manner, every circumstance which I had
" advanced ; at least as far as one case could prove
" any general doctrine. Surely men of sense must
" think that it was right to give my thoughts and
" observations upon this subject at my lectures. I
" was doing justice to my pupils to give them every
" idea, however imperfect, that might be useful to
" them in their profession. Accordingly Mr. White
" of Manchester, soon after he had attended my
" lectures, applied this doctrine to practice in treat-
" ing dislocations ; and with great success, as ap-
" pears by his paper in the second volume of Me-
" dical Observations, published at London ; and in
" the letter which accompanied that paper, he did me
" all the justice that I could expect."

*Medical Commentaries, part 1st. By W. Hunter, M. D.
1762, p. 60, note.*

of lymphatic vessels in the capsular ligament, which are so small as never yet to have been demonstrated, can bring about such an effect? Or does he think that the head of the Humerus when out of its place, and lying in the soft parts can stop the circulation of the lymph, in the principal trunks of the absorbents, when not opposed to any hard body? As easily would it stop the circulation of the blood in the principal trunks of the veins, and arteries, neither of which can be allowed.

Dr. HULL has copied Mr. Trye's objections to my theory, and has likewise made some objections of his own.

The Doctor says, p. 114, "In opposition to this theory, it may be urged."

" 1st. That there is no evidence of the bursting of a lymphatic during labour, much less of its healing in such a manner

" ner as to render the canal impervious;
" or occasion a diminution of its diameter." There is the evidence of Mr. Astley Cooper, that the contractile power of the absorbents is sufficient to occasion a rupture of their coats by tying them. That a lymphatic vessel when ruptured; either by its own contractile power; or by being lacerated, may heal in such a manner as to render that canal impervious, as well as those of the veins and arteries, there can be no doubt; and if it be cut through, it is not probable that the divided ends will ever unite again.

" 2dly, That there is not the least reason to suppose, that a lymphatic trunk ever bursts, in consequence of the transient obstruction of the lymph, induced by a labour pain. If this temporary obstruction, which does not occasion any sensible enlargement of the limb, could produce the rupture
of

“ of a lymphatic, we might expect from
“ the long continuance of the obstruc-
“ tion which takes place according to
“ Mr. White's hypothesis, that every
“ lymphatic in the limb would burst,
“ before the limb had arrived at half the
“ size, at which we know it attains in
“ the disease under consideration.” Mr.
A. Cooper has likewise proved, see note
p. 64, that the transient obstruction of
the lymph for a few minutes, will burst
an absorbent. Whenever the swelling
of the limb loses its elasticity, and pits
upon pressure, it is probable, that many
of the lymphatic vessels are burst.

“ 3dly, If the swelling of the limb
“ be occasioned by a congestion and
“ coagulation of lymph in the absorb-
“ ents, how is it possible it could ever
“ subside? How is it possible that the
“ swelling should be so nearly even as
“ it is found at first? Answer. The
absorbents

absorbents are certainly as capable of absorbing coagulated lymph¹⁸ as coagulated blood, but they are equal to ten times more than that. The swelling being so nearly even, is owing to the superficial lymphatic vessels in the extremities of the human body being so very numerous, fourteen trunks frequently accompanying one vein,

Dr. Hull goes on to ask “ why can we not trace the gradual increase of the lymphatics in every instance from a slightly enlarged, or varicose state, to that great degree of distention, at which they must arrive in order to contain all the fluid, necessary for the production of this enormous swelling of the limb ? ” To this I answer, we

M

can

¹⁸ Dr. Hull in a note to page 341, says, “ For agreeably to a law of the animal œconomy well explained and illustrated by the late John Hunter, weak, diseased, and newly formed parts, are readily absorbed, when exposed to pressure or irritation.”

can trace the gradual increase of the lymphatics in every instance, from the groin to the ends of the toes.

As it has been so confidently asserted that the transient labour pains are unable to burst a lymphatic, let us see what misfortunes they are capable of effecting.

Dr. Macbride in the 5th. vol. of the Medical Obs. and Inquiries, art. viii. p. 89, informs us that "There is
 " an accident to which women are liable
 " in the time of labour, that has escaped
 " the notice of all the writers with whom
 " I have been acquainted, but which
 " nevertheless, is accompanied with
 " great distress, and appearances that
 " are extremely alarming, and it is this;
 " Some of the blood vessels bestowed on
 " the vagina and parts which constitute
 " the os externum are ruptured, and the
 " blood being accumulated in the in-
 " terstices of the cellular membrane,
 " immediately

" immediately raises a monstrous swelling of the labia and perineum, which increases rapidly, until the load of extravasated blood comes to be so great as to burst through the teguments." The Doctor relates two cases of this kind which both terminated favourably.

Dr. Denman in his introduction to the practice of Midwifery, vol. 2d. and 2d. edition, p. 472, tells us he has met with two instances of this disorder, but believes it is void of danger. But this is not always the case. In the year 1752, Mrs. Moss, aged 27, wife of the Rev. Thomas Moss, Fellow of the collegiate church in Manchester, a well made healthy woman, above the middle stature, with a capacious pelvis, was attended in her labour, (which was a natural one) of her first child, by Mrs. Whalley, an eminent midwife of this town, at that time in great practice. At the latter end of the labour, one of the

labia pudendi suddenly swelled to an enormous size, and, in the last pain, burst, and poured out a great quantity of blood, and the lady fainted away. My late father, Dr. Thomas White, who practised midwifery, was immediately sent for. He found her in a dying situation, from the great loss of blood, which had proceeded from the labium, there not being any flooding from the uterus, or vagina. She expired in less than an hour, after her delivery. I have met with two cases of this kind, but the patients both recovered.

There is another misfortune which women are liable to, in consequence of labour pains. Dr. Smellie in his Treatise on the theory and practice of Midwifery, p. 390, gives the following description of it. " If in consequence of the long pressure of the child's head at that part of the *vagina* where its outward surface is attached to the back

" back and under part of the bladder,
 " the mortification affects the coats of
 " the *vesica urinaria*, as well as those of
 " the *vagina*; when the slough falls off,
 " the urine will pass that way, and hin-
 " der the opening (if large) from being
 " closed."

Dr. David Spence, in his system of Midwifery, has described the misfortune, in nearly the same words, and has given two cases by way of explanation, one ¹⁹ of them proves that it may likewise happen

¹⁹ " I was sent for one morning to see a woman who was in a lingering way; but, as every thing was fair, though the pains weak, I left her, after leaving some directions with her midwife. The next day I was again sent for, and the messenger told me, that the child's head had been born more than half an hour before she was dispatched. It was another hour, or more, before I could reach the place, which was nearly a mile and an half distant. I found the head born, but the shoulders sticking. The head was much swelled, in so far that I could not properly grasp it; my hands being naturally small.

pen from the shoulders of the child resting too long upon the brim of the pelvis.

I am acquainted with one lady, who had

" small. At that time, unacquainted with the improvements since made by Mr. Charles White,
 " I applied a soft cambrick handkerchief under the chin of the child, the two ends of which were brought to meet at the vertex; and given to the midwife, in order to assist me in the extraction;
 " with a view of facilitating which, I endeavoured to introduce one finger over the shoulder, so as to get it into the arm-pit, and use it as a blunt hook,
 " when I was agreeably surprised by finding the shoulder slip from that part of the pelvis where it was resting, and with very little exertion the child was brought into the world. I am almost ashamed to say, that the reason of this mode of facilitating a delivery which had been so tedious, did not occur to me till I had the pleasure of seeing Mr. White's Treatise."

" From the time that the child had remained in the birth, so great a degree of inflammation took place, that a mortification ensued, the consequence of which was a *stillicidium urinae*, under which she long laboured, and, though rather better, is still from time to time afflicted with it."

had the misfortune, after her first parturition, to have the Phlegmatia alba dolens puerarum, on one side ; in her second confinement, she had it on the other side ; and in her fourth, she had an opening formed betwixt the neck of the bladder and the vagina. Her pelvis is well formed, and her labours were all natural. She recovered from her third parturition without any material complaint. I have seen several cases of openings betwixt the vagina and the bladder, and I have met with them at different periods after delivery, according to the time which the sloughs took in separating, from a few, to many, days. The method of ascertaining the nature of this complaint, when it is suspected, is to introduce a female catheter into the urethra, and the finger into the vagina, and if there be an opening, the catheter will easily pass through into the vagina.

A third misfortune, and that a very important

important one, sometimes happens. It is described by Mr. John Bell in his Anatomy of the bones, &c. vol. 1st. p. 140. " The BRIM of the PELVIS is " that oval ring which parts the cavity " of the pelvis from the cavity of the " abdomen : it is formed by a continued " and prominent line, along the upper " part of the sacrum, the middle of the " Ilium, and the upper part or crest of " the pubis. This circle of the brim " supports the impregnated womb, keeps " it up against the pressure of the labour " pains ; and sometimes this line has " been *as sharp as a paper folder, and has* " *cut across the lower segment of the* " womb ; and so by separating the womb " from the vagina, has rendered the de- " livery impossible ; and the child es- " caping into the abdomen among the " intestines, the woman has died."

Dr. Garthshore in his observations on extra-uterine cases and on ruptures of the

uterus, has given us the following case.

CASE. I.

" Though sudden ruptures of the
 " cervix uteri may be often less dan-
 " gerous than those near the fundus,
 " yet there is one cause of transverse
 " division of the uterus, which, whether
 " delivery be performed or not, is, I
 " believe, always fatal—I mean where
 " the texture of the uterus is destroy-
 " ed, and inflammation and mortifica-
 " tion brought on by the pressure,
 " during labour, of the projecting pro-
 " cess of the os sacrum, or *sharp*
 " *ridges of the os pubis*, or ilia, in a
 " narrow pelvis, against the head or
 " breech of the child. Of this I saw
 " a very remarkable instance in Au-
 " gust, 1786. A woman, with a nar-
 " row pelvis, had, at the full time, a
 " breech presentation, and though she
 " did not suffer the strong compressing

" pains of labour more than twelve
 " hours, yet, at the end of that period,
 " and before the os uteri was completely
 " dilated, the whole fore part of the cer-
 " vix uteri separated from side to side.
 " This was owing to the pressure of the
 " large breech of the child, against the
 " sharp ridges of the ilia and pubis. The
 " child passed into the general cavity of
 " the abdomen, and a foot presented.

" In less than two hours after the
 " accident the child was extracted,
 " dead, and with no other difficulty
 " than what was occasioned by the nar-
 " rowness of the pelvis; but the woman
 " survived the delivery only five hours.

" The posterior part of the cervix
 " uteri was found to be worn through
 " by a large projection of the sacrum,
 " which was angular and sharp, but not
 " so much so as the internal superior ridge
 " of the os pubis and ilia, which resembled
 " the

“ the edge of an ivory folder, and had cut
 “ the uterus through in the manner a liga-
 “ ture does a polypus.

“ In all cases where division of the
 “ uterus is occasioned by preceding
 “ compression and mortification, I con-
 “ sider the fate of the woman as de-
 “ termined before that accident takes
 “ place. This may explain how com-
 “ paratively short a time some women
 “ can bear the compression of a head or
 “ breech in the narrow pelvis to what
 “ others can, and how sudden the fate
 “ of many must be after such a rupture.
 “ This ought to lead us, if possible,
 “ to ascertain, as well as we can, in
 “ the earlier part of the labour, not
 “ only the size, but the conformation of
 “ the narrow pelvis, and whether there
 “ be any sharp angles, in which case
 “ compression is always to be dreaded.”

London Medical Journal, vol. 8.
 for the year 1787, p. 376.

CASE II.

" What one has seen, perhaps, by
 " singular chance, he is nevertheless
 " apt to consider as the most natural or
 " frequent occurrence. The rude exer-
 " tion of manual operation, or the vio-
 " lent efforts of the child, are described
 " as the most frequent cause of the rup-
 " ture of the uterus. But in a case
 " of this kind, which I met with, when
 " the child's arm projected into the
 " belly, amongst the viscera, the cause
 " was on dissection found to be very dif-
 " ferent; for the pelvis being extremely
 " narrow, little more than an inch in
 " width, *the uterus by the continued pres-*
 " *sure betwixt the brim of the pelvis and*
 " *the child's head, had been destroyed in*
 " *the course of a tedious labour.*"

System of dissections, by Charles
 Bell, part third, p. 89.

Dr. Hull in his second letter to Mr.
 Simmons, part second, p. 209, says,
 " Where

" Where any particular obstacle to the
 " expulsion of the child takes place, a
 " rupture of the uterus may happen,
 " from the uterine contractions being
 " unusually strong; or from the tex-
 " ture of the lower part of the uterus
 " being so far injured by being press-
 " ed forcibly against the bones of the
 " pelvis, that it is no longer capable of
 " sustaining the violence of its own con-
 " tractions, or is even worn through.

CASE III.

On Monday the 24th of March, 1800, I was called, at six o'clock in the evening, to a consultation, along with Mr. Hall, and Mr. Wood, to visit Jane Kennerly, of Water-street, Manchester, aged 35, an home patient of the Lying-in Hospital, who was then in labour and was attended by Mrs. Bradley, the midwife. The account she gave of herself was, that this was her eighth pregnancy, that her parturitions had been very easy, and she had enjoyed very good

good health, till about the second or third month of her present pregnaney, when she was seized with pain, and lameness, in her hips, resembling the rheumatism, and had been, ever since, very little able to move. The membranes had burst eight days before, when she had very strong pains, which in a short time abated, and had been trifling ever since. The midwife had never been able to ascertain, what part of the child presented, nor had the mother perccived the child to move, since the pains abated. Rigors, very quick pulse, and other febrile symptoms, together with a putrid diarrhœa had so exhausted her, that we were unanimously of opinion, that she was in a dying situation, and therefore did not judge it prudent to make any attempt to deliver, but directed a cordial draught, with an opiate. She expired in four hours after we saw her on Monday evening. On Wednesday evening, the body was opened

ed, by Mr. Hall, in the presence of Mr. Gibson, Mr. Worthington Barlow, and myself. We found the child in the cavity of the abdomen, with the head lying up to the mother's stomach, with the face to the back, enveloped in coagulable lymph. We discovered that the child had escaped out of the uterus, through a laceration, in the anterior and right side of the neck of that organ, four inches in length. The Placenta was in the uterus, but detached. On examining the pelvis, we found the lower aperture tolerably well formed, but the distance betwixt the jutting out of the os sacrum, to the Symphysis of the pubis, was only about two inches and a half, and the prominent line, in the body of the pelvis, which makes a part of the brim of the pelvis, was as sharp, as that which I have described, belonging to Mr. Gibson, but more prominent, which sufficiently accounts for the laceration, and bursting of the neck of the womb.

CASE IV.

In the latter end of January, 1791, I was called, along with my late son, Dr. White, to visit the wife of John Collings, aged 36, in Cockpit-hill, Manchester. She was in labour of her third child, and was attended by Mrs. Pollit, the Midwife. She had enjoyed good health, and nothing material had happened in her two former labours. It is sufficient for my present purpose, to say, that she was dying when we were called to her, and she expired soon after, without any attempt having been made to deliver. Dr. White opened the body the next day, and found the child and Placenta in the cavity of the abdomen. It had passed through a laceration of the upper and anterior part of the vagina, transversely and inclining to the right side. I was not present at the dissection, but my son preserved the uterus and vagina, which I had an opportunity of seeing. I have no notes to inform me, whether

ther the body of the os pubis presented that prominent sharp line, sufficient to cut or lacerate the vagina, but from the circumstances attending this case, and from what I had observed in the preceding one, I am much inclined to think it not improbable.

It has been proved, that labour pains are sufficient to rupture a blood vessel, at or near the groin or vagina. The blood had distended the labium pudendi, and Perinæum to an enormous size, and at last had burst through the integuments, discharging a great quantity of blood ; and in one instance, the patient bled to death.

It has been proved that labour pains are sufficient to press both the head and shoulders of the child against the crest of the os pubis ; the coats of the neck of the bladder, and of the vagina, being by that means so forcibly squeezed betwixt two hard bodies, a partial mortification

has been brought on; and when the slough has separated, the urine has burst into the vagina, and has continued to flow that way, instead of going through, its natural passage, the urethra.

It has been proved, that the labour pains are sufficient to press the uterus and peritonæum against the sharp prominent line, on the body of the pelvis, so forcibly as to cut through, lacerate, or rupture the uterus and Peritonæum, in such a manner, as to permit the child to pass into the general cavity of the abdomen.

Some of my readers may still deny that a lymphatic vessel, can by its own contractile power, be ruptured by the pressure of the child's head against the brim of the pelvis, by stopping the circulation of the lymph.

They may likewise possibly deny that a partial mortification, producing a slough, can be brought on a lymphatic vessel,

vessel, by the gravid uterus being pressed against the prominent line on the brim of the pelvis, on the body of the pubis, when that line forms only an obtuse angle.

But they cannot deny that the same sharp bone which cuts through and lacerates the uterus and peritonæum, will also cut through or lacerate all the intermediate soft parts which lie betwixt the uterus and that sharp bone.

That the principal lymphatic trunks from the lower extremities, labium pudendi, nates, groin, lumbar and hypogastric region, do lie upon, and wrap over that prominent line on the body of the os pubis, which in some subjects is so sharp, is proved by injections and dissections of these vessels.

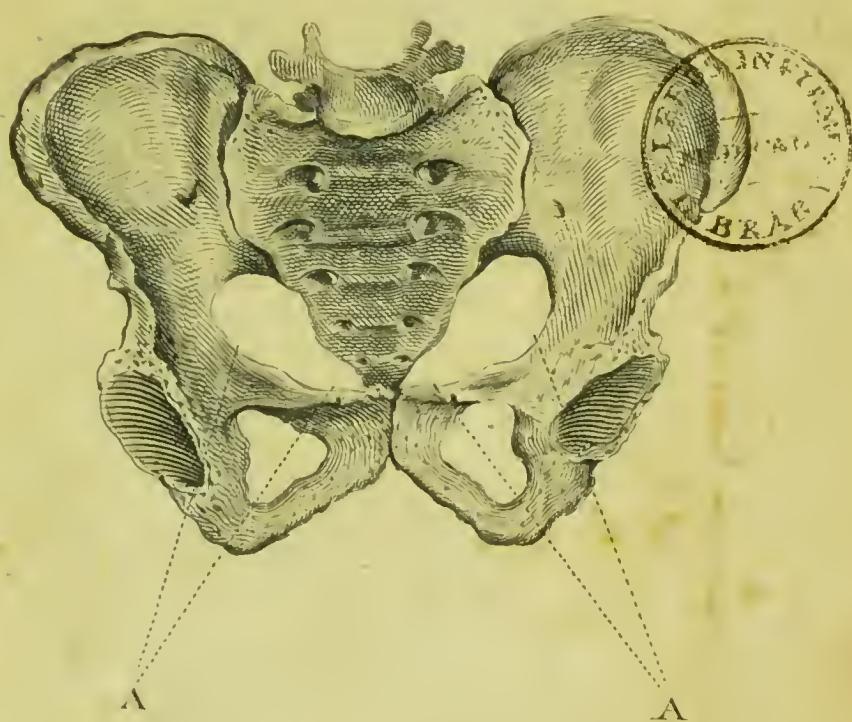
The following plates may not be necessary to my anatomical readers, but to others they may serve to elucidate the subject.

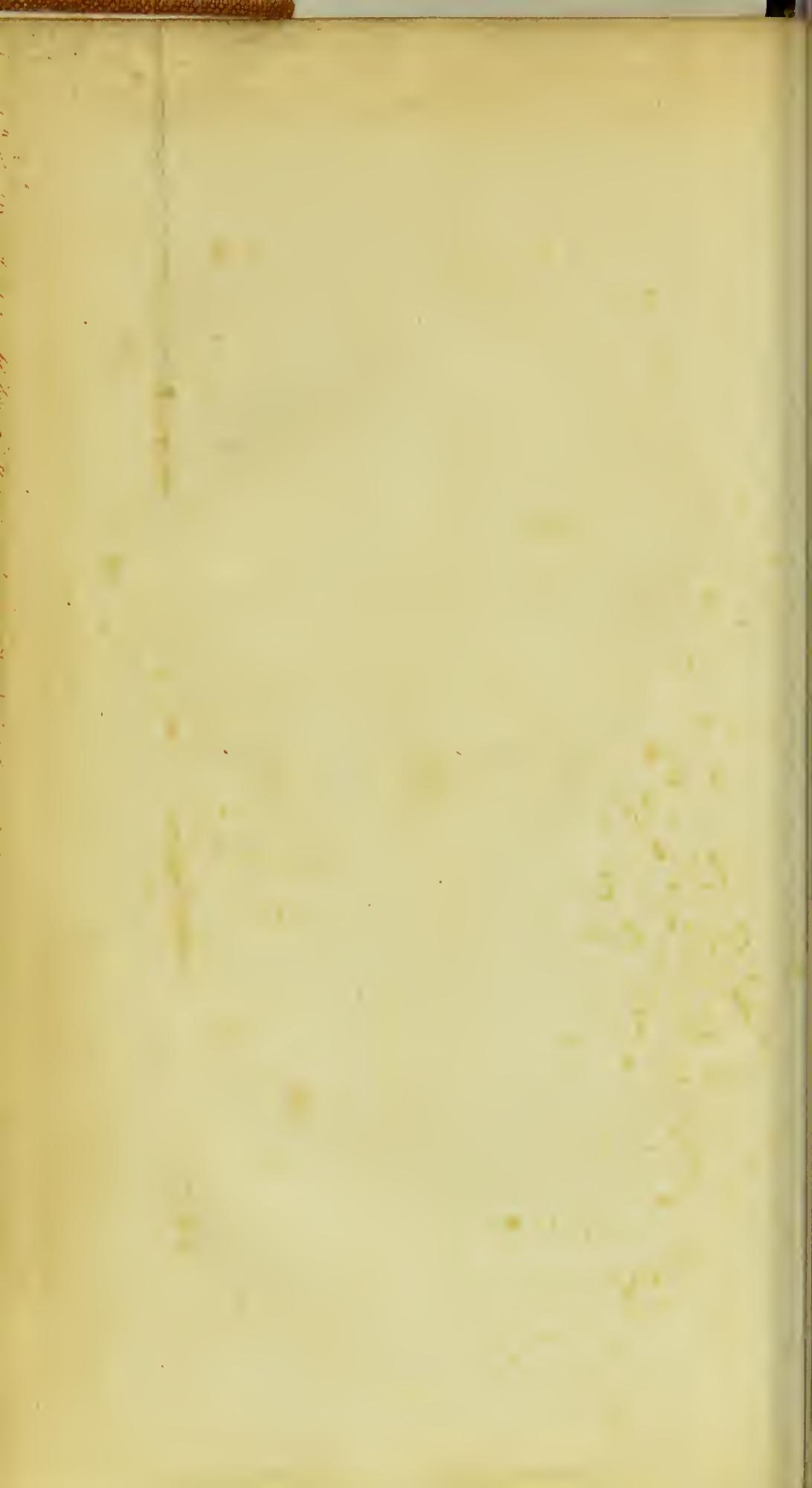
Plate the First

Is taken from a female pelvis, at present in my museum, belonging to Mr. Gibson. The dimensions of the pelvis, from the Symphysis of the pubis, to the jutting out of the os sacrum, without the cartilages, is four inches and a quarter, and from one Ilium to the other, at the brim, is five inches.

The dotted lines at A. shew the prominent line, of the brim of the pelvis, on the body of the os pubis, which in this subject is as sharp as some table knives, for the space of two inches, and jagged like a saw, extending from the crest of the pubis, to the end of that bone, which joins the Ilium. The principal trunks of the lymphatic vessels, which pass under Pourpart's ligament, wrap over this sharp edge of the bone, and dip down into the pelvis.

I am





I am informed, that Dr. Combe, physician to the British Lying-in Hospital, in Brownlow-street, Long Acre, is possessed of a pelvis, where the prominent line, on the body of the pubis, is nearly as sharp as this. I have, in my possession, several pelvises, where the prominent line, forms angles of different degrees.

Plate Second and Third

Are taken from preparations of the lymphatic vessels made by my late son, Dr. White, fifteen years ago when he was house pupil and assistant to the late Mr. Cruikshank. They are not given to shew any particular structure or excellence, for by the damage they sustained in the carriage from London, and by frequent handling, many of the smaller lymphatics have burst, and the quicksilver has escaped, and some others are obscured by repeated coats of varnish, but I have been contented to give these,

these, because no other plates, which have been published, exhibit these vessels in such a point of view as properly to convey my meaning.

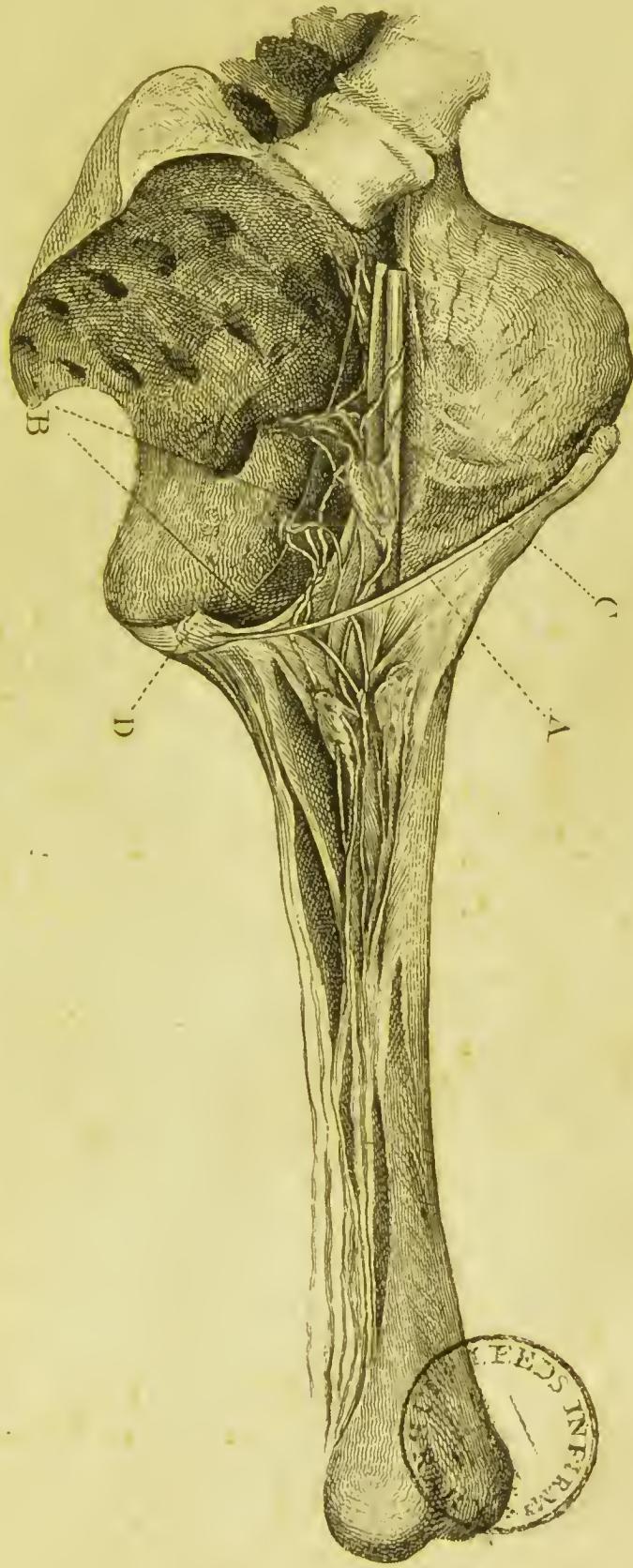
Plate the Second

Shews an injection of the superficial lymphatic vessels of the left lower extremity.

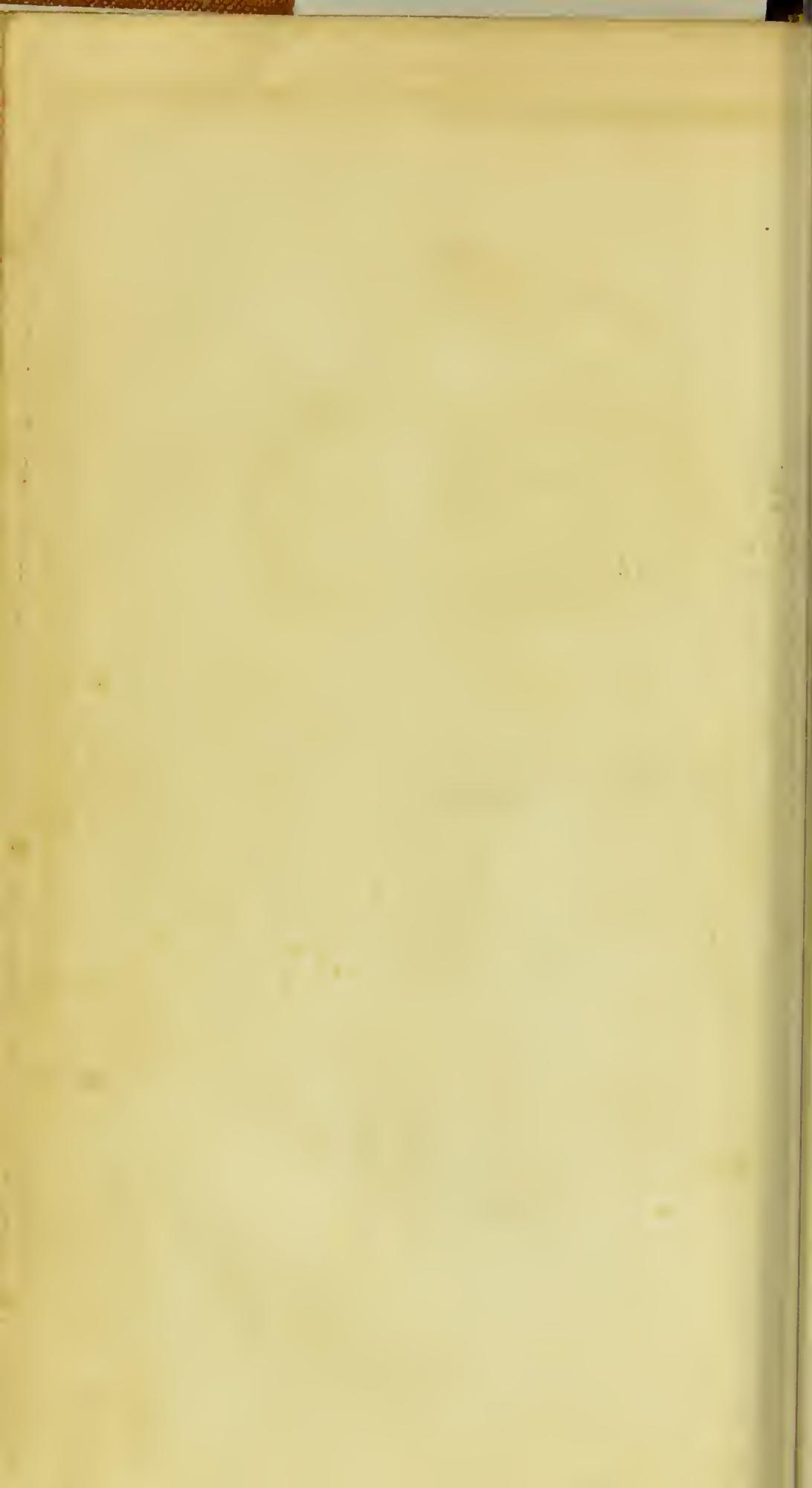
- A.* Poupart's ligament.
- B.* Marks out the situation and extent of the sharp edge of the os pubis, with the lymphatics wrapping round it, and dipping down into, the cavity of the pelvis.
- C.* Bougies passed into the Iliac artery and vein, which have the deep seated lymphatics upon them.
- D.* The Symphysis pubis.

Plate Third

Shews an injection of the deep seated lymphatic vessels which accompany the crural



LEEDS INFIRM





Pl. 3



crural artery on the right thigh of the same subject with the foregoing.

- A. The crural and Iliac arteries, with the lymphatics passing up along with them.
- B. The thigh bone.
- C. The os Ilium.

Plate the Fourth,

Together with the history of the case, is copied from my CASES IN SURGERY, PART the FIRST; p. 139, pub. in 1770.

“ Dissection of an arm on which the Operation for the Aneurism had been performed.

“ About two years ago a woman died in the Lunatic Hospital in Manchester, who, about fourteen years before, had undergone the operation for an aneurism, occasioned by bleeding in the right arm, which perfectly succeeded. As opportunities of examining the state of the parts after death seldom

“ seldom occur, I was determined not
 “ to miss that which now offered. I
 “ accordingly injected the axillary ar-
 “ tery with wax, and then took off the
 “ arm at the joint, and dissected it. The
 “ annexed figure is a true representation
 “ of its appearance.

“ As I do not recollect to have seen
 “ or heard of a ²⁰ preparation of this sort,
 “ I imagine it will not be unacceptable
 “ to the public. We may here not only
 “ admire the wonderful power of nature
 “ in continuing the circulation, when
 “ almost three inches of the princi-
 “ pal artery were obliterated, but sur-
 “ geons may be encouraged never to
 “ despair of success in a similar opera-
 “ tion:

²⁰ “ MOLINELLUS, in the Act Benon. vol. i.
 “ part 2, page 72, has given us the history and a
 “ drawing of an aneurism similar to this, which he
 “ dissected, but it does not appear that the arteries
 “ were injected, or the parts preserved. I am obliged
 “ to Dr. Hunter for this note, as I am not in possession
 “ of the book.”



PL. 4



“tion: for in this case the humeral artery was tied above it’s division into the radial, ulnar, and interosseous arteries: and the small capillary arteries appear to have undergone so great a dilatation, as when taken together, to exceed in diameter the trunk of the humeral artery, which, by their ²¹ tortuous anastomoses, they fill again beneath the obliteration.

“ My worthy friend Dr. Hunter has done me the honour to give this preparation a place amongst his valuable collections.

Plate Fourth.

“ A fore view of the preparation. The dotted lines at A express the extent of the obliteration of the trunk of the artery.

P

Case

²¹ “ For a curious investigation of these tortuous convolutions, see Dr. Hunter’s observations on aneurisms in the Medical Observations and Inquiries, vol. ii. p. 411, and Molinellius in the Act. Benon.

I have given this plate and explanation to shew what has actually taken place in the arterial system. That the same will be effected in the lymphatic system there can be no doubt.

CASE V.

Dr. Ferriar having given a translation of the following case from the Medical Museum, it may not be disagreeable to my readers to have a copy of the original from a volume entitled

“ COMMENTARII SOCIETATIS RE-
“ GIAE SCIENTIARUM GOTTINGENSIS
“ TOMUS II. AD ANNUM MDCCCLI.

I. GOTTF. ZINII SODALIS EX-
“ TRAORDINARII OBSERVATIONES EX
“ CORPORIBUS MORBOSIS.

OBSERVATIO I

“ ODEMA PEDIS EX PRESSA VENA-
“ CRURALI.”

“ Puerpera triginta fere annos nata,
“ partum valde difficultem perpessa, lo-
“ chiorum

" chiorum fluxum, dum parum caute
 " curam corporis habet, plane turbat.
 " *Paulo post pes dexter totus ab inguine*
 " *ad calcem cum labio vulvae dextro æde-*
 " *matoso tumore adfligitur accidente si-*
 " mul appetitus defectu. Quem ad tu-
 " morem tollendum, omnis generis,
 " quae ars medica suppeditat, subsidia
 " in usum vocantur, irrito tamen suc-
 " cessu. Nec diaphoretica, nec diure-
 " tica, nec purgantia opem adferunt.
 " Ex vapore spirituosorum & frictione
 " summus dolor. *Cutis ipsa in femore*
 " *inciditur, ut per fonticulum aqua eva-*
 " *cuetur, sed paucae tantum guttulae*
 " *effluunt.* Serum enim in tela cellulosa
 " in gelatinæ tremulae naturam feci-
 " abiit, omni liquidiori parte resorpta.
 " *Bimestri tandem spatio exacto astmatica*
 " *moritur.* Sectione instituta apparent
 " glandulae quaedam inguinales, scirr-
 " osae, valde auctae, venae crurali cir-
 " cumpositae, quae lumen illius valde
 " diminuerunt.

Before I make any remarks upon this case, it will be necessary to state that this paper was not read in the Gottingen Society, before the year 1752. At that time it was generally believed that the veins were the system of absorbents. The discovery that this office belonged to the lymphatics, was not published before the year 1755. This accounts for the title of this **OBSERVATION** *Œdema Pedis ex pressa vena crurali.* For there were no varicous veins, no discoloration of the skin, nor any symptoms to indicate a stoppage of the venal blood. He could not therefore, upon any other principle, have entitled this paper, *An ædematose foot, (or rather limb) from a compression of the crural vein* As the nature of the patient's death is omitted in the translation, which appeared in the Medical Museum, and was copied by Dr. Ferriar, and is, in some other respects, defective, in point of accuracy, I will take the liberty of giving another,
perfectly

perfectly literal, especially as this case has been brought to prove that she died of *Phlegmatia alba dolens puerarum.*

“ A lying-in woman, of nearly thirty
 “ years of age, *after a difficult labour*, had
 “ the Lochia greatly disturbed, for want
 “ of proper care. Soon after, *the whole*
 “ *right limb*²² *from the groin to the heel*,
 “ together with the *right labium pudendi*,
 “ was attacked with an œdematose swel-
 “ ling. At the same time, she was also
 “ seized, with loss of appetite. Every pro-
 “ bable means, afforded by the art of heal-
 “ ing, was used to remove the swelling,
 “ but without success. Neither Diapho-
 “ retics, nor diuretics, nor purgatives
 “ afforded any relief. Spirituous fomen-
 “ tations, and frictions, gave the greatest
 “ pain. *An incision was made, through*
 “ *the skin of the thigh, that the water might*
 “ *be*

²² When the author makes use of the word *pes*, it is clear he means the whole lower extremity.

" be drained off, by an issue, but only a few
 " small drops were discharged by it. For
 " the serum in the cellular membrane seem-
 " ed almost to be gone, into the nature of a
 " tremulous jelly, all its liquid parts being
 " absorbed. At length in the space of
 " two months, she died asthmatick. Upon
 " dissection, some of the inguinal glands
 " appeared schirrhous, and much en-
 " larged, surrounding the crural vein,
 " which they greatly obscured."

I wish Professor Zinn had been more full in his description of the disease, as well as of the dissection, but many allowances must be made, for his want of that knowledge of the lymphatics, which the present anatomists possess. Thus far however may be concluded, that it was a local disorder, and that she died asthmatick.

It does not appear that she had any particular disorder during her pregnancy, nor previous to the swelling of the limb ;
 nor

nor that she had any inflammation of the lymphatics, or of the veins, or inflammation of any kind ; nor anasarca, as no water drained off when the incision was made.

If Schirrhous Inguinal Glands were the cause of *Phlegmatia alba dolens Puerarum*, they would be perceived before the swelling of the limb, and that they do not even generally accompany that complaint, is evident, because the patients would not so constantly and invariably recover from it, without some remains of *schirri*. But enlarged inguinal glands, may be the effect of the disorder. That the lymph however was obstructed, at least, as high as where the lymphatic vessels from the *labium pudendi*, join those from the lower extremity, appears perfectly clear.

CASE VI.

The case of Jane Waters having been differently represented by two gentlemen

men, and having been brought forward, for the purpose of overturning my theory of the disease, and to lay a foundation for others; to combat my method of cure, and to substitute one which should shorten the duration of the disorder; I think I have a right both in honour and equity to avail myself of every source of information in my power, especially since the name and place of abode of the patient have been stated, in order to give credit and authenticity to the case. As I have advanced some novel doctrines, and shall produce some facts which have not yet appeared, the public have a right to expect this information from me, and I doubt not, but upon a fair and just statement of the case, the reader will see, that it is so far from militating against my doctrines, that it is the fullest vindication of them that could possibly have occurred. I am so confident of this, that I durst rest my defence and my reputation upon this case, if I had

had no other to produce.

Jane Waters of Garden-street, Salford, in her second pregnancy, and in the 27th year of her age, enjoyed as good health, as any person in that situation, having no particular complaints. After a very laborious parturition which had continued four days, she was delivered by Mr. Charlton, on the 26th of December, 1797, as she lay upon her left side. In thirty hours after delivery, she was attacked with violent pain in her loin, and hip, on the left side, and afterwards in the ham and knee. She experienced no rigors, nor other symptoms of fever, before the pain seized her. In about two days after, the swelling began to appear, first in the groin, labium pudendi, and upper part of the thigh, on the left side, and descended to the leg and foot; the swelling was elastic, tense, uniform, and attended with great pain, particu-

larly upon being moved. The limb was warm, but not hot. Her thigh was nearly as thick as her waist. There were no red nor purple streakes upon it, nor any signs of inflammation ; the skin was of a paler colour than natural. Leeches were twice applied, eight the first time, which procured a plentiful evacuation, and six the second time ; Rochelle salts were given, and frequently repeated, with proper effect, and a large blister was applied round the knee. The swelling began to subside, first in the groin, *labium pudendi*, and upper part of the thigh, from which it nearly vanished, before the expiration of the month, but remained in the leg and foot. The pain in her loins, as she expressed it, continued very severe ; and in about a month after her delivery, just before she removed to Newton Heath, she perceived a tumour forming there, but upon examination, this proved to be below the loin

loin, on the lower and back part of the pelvis, on the left side, so low, that she could not sit on that side. This tumour encreased to the size of a child's head, and in about fifteen weeks after her delivery, it burst, and discharged a large quantity of matter, and healed in a week's time; when the swelling in the leg and foot entirely subsided. She never was able to walk after the attack of *Phlegmatia alba dolens* till the abscess burst, and she was confined eleven weeks to her bed, at Newton Heath. She recovered very fast after this time, has born another child, without experiencing any return of her disorder, or any inconveniences in consequence of it, as she enjoys perfect health, and is as active as possible. The cicatrix is situated near the edge of the lower part of the sacrum, on the left side, is not a superficial one, but hollow, and deep enough to contain the end of a finger.

This woman had neither Anasarca Gravidarum, Thoracic Inflammation, Puerperal fever, Inflammation of the absorbents; nor any symptoms of inflammation whatever. She had the *Phlegmatia albæ dolens puerperarum*, in its perfect, simple, uncomplicated state, but its termination was singular. In the treatment of the disorder, the antiphlogistic plan was pursued under the direction of one of its greatest advocates, and yet it proved the most tedious, painful, and distressing case of any we have upon record.

In stating this circumstance, I do not mean to cast any reflection upon the gentleman who attended this poor woman; whose professional abilities are well known; for so unusual a termination could not be foreseen by the medical practitioner. It is clear however, that the plan pursued, did not answer the purpose of shortening the disease.

The

The abscess was neither an Iliac, nor a lumbar one, nor one under the fascia lata ; in the acetabulum ; at the symphysis of the pubis ; at the junction of the ossa innominata with the sacrum ; in the *labium pudendi* ; in perinæo ; nor in ano. It was not a metastasis, for it formed where the pain first commenced, and continued. It was not critical, in respect to the disorder in question, for the pathognomonic and most of the other symptoms which usually attend the phlegmatia alba dolens puerperarum, went off about the usual time.

It was decidedly a collection of pus, formed within the pelvis on the left side, and by its own gravity had descended through the great sciatic notch, along with the sciatic nerve, and the blood vessels ; it passed under the edge of the gluteus maximus, at the lower part of the sacrum, and burst through the integuments on that side, and I am clear in my opinion

opinion that it was owing to coagulated lymph from the ruptured lymphatics, on the brim of the pelvis, which had lodged behind the peritonæum, and could not, as usual, be absorbed. It had acted therefore as an extraneous or foreign body, and caused a formation of matter, which had made its way out, in the manner above described, which of all others was the most easy, and most natural. It could not get into the open cavity of the pelvis, without bursting through the peritonæum, and it could not rise up over the brim of the pelvis, and pass through Poupart's ligament, without ascending against its own gravity. In the way it took, it had no difficulties to encounter, it would fall down betwixt the ischium and the peritonæum, would insinuate itself into the cellular membrane, and make its way out by the nearest and most direct passage; and the orifice being in the most dependant part of the abscess, the matter would easily drain off,
without

without any assistance from art. A full confirmation of this, is, that she not only enjoys perfect health, but all the parts perform their offices. She is as active as ever ; and has born another child since, without any complaint.

CASE VII.

In my former inquiry I said that this “ is a disorder *sui generis*,” and indeed I have never seen any thing similar to it, except in an accident which happened to Mr. R. a corpulent gentleman of about 70 years of age, and whose weight was upwards of 16 stone. He had the misfortune on the 24th of July, 1798, to fall down a precipice at Runcorn, whose perpendicular height was nearly thirteen feet, at the bottom of which, were several large rough stones. He fell upon his left hip. Mr. Eaton, an ingenuous surgeon, at Horton Castle, saw him immediately after the accident, and upon examination, could not find any dislocation,

tion, but could distinctly perceive a grating of the bones, when he moved the hip joint, and had no doubt of a fracture, but could not say where it was. I was requested to attend him, but Runcorn being near thirty miles from Manchester, I did not see him till the next day, when I was immediately satisfied, that there was a fracture ; yet it was decidedly not in the body of the thigh bone, in the neck, or in the great trochanter. I therefore had no hesitation in saying, that it was in the pelvis, but on account of his bulk, and some little tension and swelling, which had come on, it was difficult to determine by the touch, in what part of the pelvis the fracture had taken place. He had passed a restless night, and was a little feverish ; neutral draughts, opium, and an opening apozem were directed for him, and saturnine applications to the affected parts. No more swelling came on during the first or second week, than what might be expected from

from the contusion on the external part of the hip, but at the expiration of a fortnight, a sudden swelling appeared in the upper part of the thigh, *and the left side of the scrotum*, and extended itself downwards to every part of the thigh, leg and foot, the tension of the skin being extreme, the tumour not cold; nor pitting like a leuco-phlegmatia, but warm, hard, tense, glossy, of a pale white colour, and exceedingly painful. There were no red streakes running along the course of the lymphatic vessels, nor any swelling or inflammation in the glands. Leeches were applied, fomentations used, and the intestinal canal was kept sufficiently open. This swelling continued some weeks, during which time, he was confined to his bed. I must observe that neither the right side of the scrotum nor either of the testicles were in the least swelled. The first parts which began to subside, were the upper part of the thigh, and the scrotum.

As soon as this swelling made its appearance, I had no doubt what was the cause of it. Whoever will examine a skeleton, will immediately be satisfied, what part of the pelvis will be fractured, if a sufficient force be applied to the hip joint, that is, to the great Trochanter, which was the part that would first come into contact with the ground. It would be fractured in the body of the os pubis, which is the weakest part of that oval ring, which forms the brim of the pelvis, exactly where the lymphatic vessels wrap over the edge of that bone, and of course must inevitably rupture those lymphatic vessels, which are ruptured in the *Phlegmatio alba dolens Puerperarum.* How can we possibly account for the swelling of the left side of the scrotum only at the expiration of a fortnight, but from the rupture of the lymphatic vessels of that side of the scrotum, and the mouths of those vessels healing in that time, and totally obstructing the passage of the lymph ?

lymph? There cannot be a doubt upon this head, if we consider that *the superficial lymphatics of the scrotum enter the upper and inner inguinal glands, and the lymph from them is carried under Poupart's ligament, and over the brim of the pelvis, on the body of the os pubis*, precisely in the same manner as those of the labium pudendi. Nothing therefore can be more similar than this case is to the *Phlegmatia alba dolens Puerarum*. Here was the same kind of swelling, confined to the inguinal, hypogastric, and lumbar regions, and the whole limb and genitals on one side. The lymphatic vessels were ruptured in the same place, and by the sharp edges of the same bone, with this difference only, that in one, it is sharp by nature, in the other was become so by being fractured. Time, place, and all the symptoms and circumstances agree to make the diseases as perfectly similar, as can possibly happen, considering the one case to be that of a male, the other of a female, the first occasioned by accident, the other by parturition. If

If it be granted me that this swelling was occasioned by the broken bone, injuring the lymphatics, how can we account for it upon any other principle, than that the lymphatic vessels which pass over, and wrap round the body of the os pubis, were ruptured by the sharp edges of that broken bone, the mouths of which were healed up, and rendered impervious? At the expiration of a fortnight, those lymphatics below the cicatrix would be gorged with lymph, because they could not empty themselves into the thoracic duct, until the anastomosing vessels were sufficiently enlarged, to carry, with facility, all the lymph from the diseased and swelled parts.

If this had proceeded from an inflammation, brought on the lymphatics, by the accident, it certainly would have appeared in less than a fortnight, and would have shewn itself through the skin, by its colour, either red or purple.

If

If it had proceeded from inflammation only, it would scarcely have continued so long as several weeks, but if it proceeded from the lymphatics being rendered impervious, by the cicatrix, the lymph would most probably take that time, in finding itself a *complete* passage, through the anastomosing vessels.



I will now recapitulate, in a brief manner, an account of the NATURE and CAUSE of this disorder.

When the brim of the pelvis forms a prominent line on the body of the os pubis, and is as sharp as an ivory paper folder, or as some knives, and jagged like a saw, and the gravid uterus, by the violence of the labour pains, forces the lymphatics against this sharp edge, it must cut or lacerate those lymphatic vessels, which wrap round it, and dip down into the pelvis, and they will discharge

charge their contents. In some cases the extravasated lymph will be immediately absorbed by the lymphatics in the neighbourhood. In others it will accumulate, coagulate, and give pain, some days prior to the swelling of the limb, by separating the peritoneum from its connections with the adjacent parts, and at last will be absorbed. But in some few cases, it may not be absorbed, but produce an abscess. In a space of time, generally betwixt twenty-four hours and six weeks, the orifices in the ruptured lymphatics will close, and they will be gorged with lymph, which will be impeded in them, but it will continue to flow in those which have not been ruptured, particularly in the deep seated lymphatics which accompany the Iliac artery, and by anastomosing with those which have been ruptured, will prevent any material injury for the present, and in time will entirely supply their place. By the obstruction of the lymph, the groin, labium

bium pudendi, and upper part of the thigh swell, the tumour gradually extends towards the leg and foot, and grows very painful, white, tense, elastic, hard, glossy, and uniform. The pain is occasioned by the great and sudden distension of the lymphatic vessels; the whiteness by the parts being filled with lymph, and compressing the blood vessels so much, that neither arteries, nor veins, appear externally: The tenseness, elasticity, hardness, and glossiness, depend on the great distension of the lymphatic vessels, which do not easily give way; the uniformity of the swelling on the distension of the cutaneous lymphatics, which are innumerable. By this great distension, and consequent compression, the exhalents are prevented from secreting so much lymph²³, and consequently there is

²³ In the beginning of October, 1800, Mrs. G. had her breast extirpated by Mr. Gibson, for a schirrhous which had subsisted for two or three years; attended

is not so great a supply. The lymphatic glands sometimes grow painful and swell, which is owing to the *vasa inferentia* sending the lymph into them, quicker, than the *vasa efferentia* can discharge it.

Pains

attended with an enlargement of the axillary glands, a few of which also were removed. Some weeks after the operation, the integuments of the breast and top of the shoulder, were attacked with swelling, which gradually extended down the arm, to the hand and fingers. The parts nearest the breast were of a schirrhous hardness, scarcely pitting upon pressure; This character became less and less distinct till it ended in the hand and fingers in true œdema.

The swelling continued to increase till the skin was extremely tense, when the patient was attacked with jaundice to a very high degree. Every part of the skin exhibited a more or less intense yellow, except the arm affected, which remained unaltered in its colour and continued so for many days. In a short time, she was attacked with general dropsy, when the arm affected became more swelled, and for the first time partook of the yellow tinge of the other parts of the body, which continued till her death.

Mr. Gibson has favoured me with the above case, which proves, that the action of the exhalants was for a time suspended, or the swelled arm would have become yellow as soon as the other parts.

Pains will sometimes attack parts, which have neither lymphatic glands, large nerves, blood vessels, nor lymphatics, which can only be accounted for from sympathy²⁴. The words *calidus* hot, or warm, when speaking of the swelling of the limb, are made use of in contradistinction to *leuco-phlegmatia*, in which the limb is white and cold; in

s. this

²⁴ Many years ago I was called to visit a young gentleman at Wigan, who had a violent pain in his knee, and was unable to move without crutches. The late Doctors, Allcock and Pemberton, men at that time, of as great eminence in their profession, as any in the counties of Lancaster or Chester, had been employed for him. Fomentations, blisters, and many other applications were made use of to the knee, without any good effect. Neither the professional gentlemen, the Patient himself, nor his friends, had the least suspicion, of the complaint being in any other part, but that joint. As soon as I saw him, and had examined his knee, not finding any reason for the disorder being there, except the pain, I asked him, if he had no pain or swelling in his hip? (as I had seen complaints, similar to this, where the seat of the disease was in this joint,) but was answered in the negative. I however desired to see the hip, when it appeared evident to his friends,

this disorder it is white and warm. When speaking of increased heat, it is to be understood of the whole body, not of the limb alone, as that does not appear to be hotter than the other parts of the body. There is heat in all fevers, but that does not imply inflammation ; every fever is not inflammatory. There is a quick pulse, but that is owing to irritation, by the sudden and violent distension of the irritable coats of the lymphatic vessels.

If you puncture the skin with a lancet, the lymph does not flow out as in anasarca, where it is thin, and is lodged in the cells of the cellular membrane, which communicate throughout the whole

friends, as well as to me, that the hip joint, was half as large again as the other. It proved a tedious case. After many months confinement, an abscess formed there, which burst ; several pieces of bone were thrown off by exfoliation, and I attended him, occasionally for several years ; but he never had any other complaint in his knee, except the pain, which could not proceed from any thing but sympathy.

whole body. In this disorder you do not puncture the trunks of the absorbents, but the *minima vasa*, only, of the cutaneous lymphatics. The violent pain and distension do not continue many days; the anastomosing lymphatics begin to enlarge, and by degrees carry off the obstructed lymph; but it is many weeks before it has obtained a perfectly free passage.

This disorder has not been known to return in the same limb, though women have had several children, after having had this complaint; because the same accident cannot happen a second time to those lymphatics.

CURE.

Since I wrote my first INQUIRY little has been added to the method of cure, except that of bleeding with leeches by Mr. Trye, which was followed by Dr. Ferriar; the exhibition of Cremor Tar-
tari

tari by Levret, which is also recommended by Dr. Ferriar; the introducing of mercury by Mr. Trye, which was adopted by Dr. Hull; and Digitalis, in the first stage, by Dr. Hull. The following paragraph is copied from the 23d No. of the Medical and Physical Journal, vol. 5th. p. 95, in a review of Dr. Hull's Essay on Phlegmatia Dolens. The Editors say, " Before we proceed to the rest of the work, we take this opportunity of mentioning an application for this disease, which has been used with invincible success, for several years, at one of the best regulated hospital in London, and where our readers will readily suppose, from the great number of women annually delivered there, that instances of the *œdema lacteum*, or *phlegmatia dolens*, are not very uncommon. It is the practice of that hospital, to apply flannel well soaked in hot vinegar to the groin of the affected limb, and to renew it frequently; and we

“ we are well assured that no other remedies beyond those necessary to keep the bowels regular are ever used, notwithstanding the fever, pain, &c. which commonly accompany this disease.”

I shall only observe, that much must be left to the discretion of the practitioner, who ought to prescribe according to the symptoms and circumstances of the case. No certain rule can be laid down. If the patient be robust and plethoric, the antiphlogistic plan may be pursued with advantage, but if she be reduced by floodings or other evacuations, it would be highly absurd to debilitate her still more. It was said of two physicians of very great eminence, practising physic at the same time at Edinburgh, that one of them always endeavoured *to take away the cause*, supposing *the effect would cease*, the other paid no regard to that rule; but attacked the symptoms, and the latter had the reputation of being the more successful

successful practitioner. That general rule certainly holds good in the practice of surgery, but in physic it may be otherwise, for *Natura est Medicatrix Morborum*, and we should speak more modestly, and, perhaps, more justly, if we were to say that we had conducted our patient safely through the disorder, rather than that we had cured her. Facts in regard to remedies in diseases, are frequently with great difficulty, ascertained; and what appears to cure the same complaint in one person, may not succeed in another, and yet the patient may do well. When this disease is complicated with others, as Phlegmon, Erysipelas, Anasarca, Thoracic Inflammation, Inflammation of the absorbents, Puerperal Fever, &c. it must be treated accordingly.

FINIS.



From the Press of W. Shelmerdine and Co.
No. 5, Hanging-Ditch.